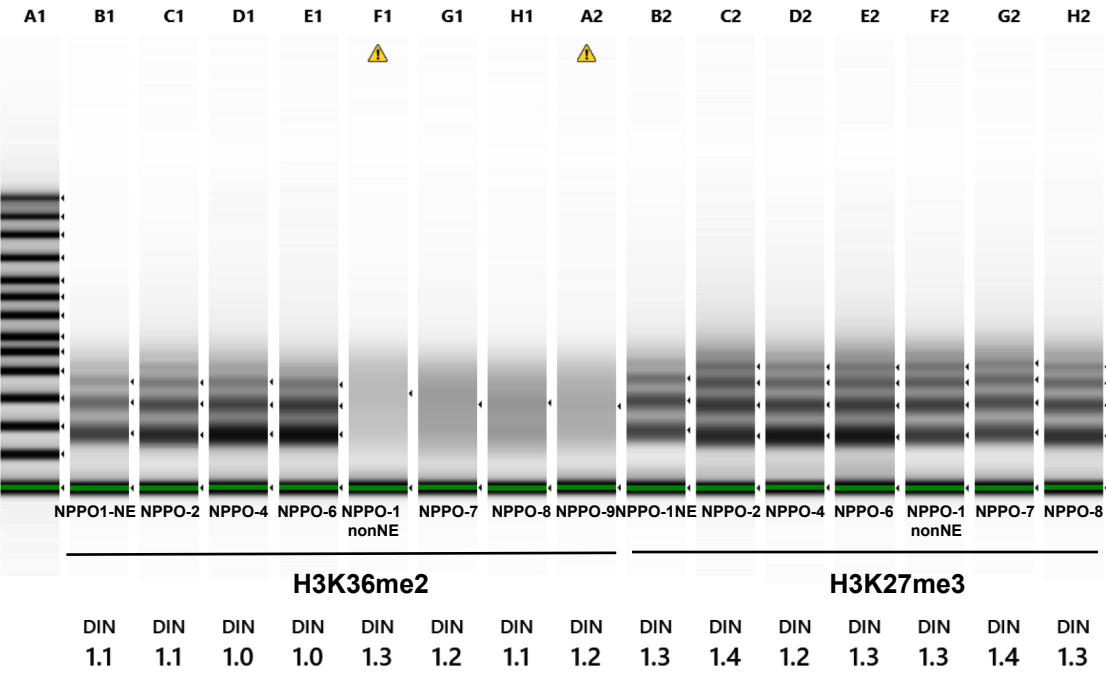
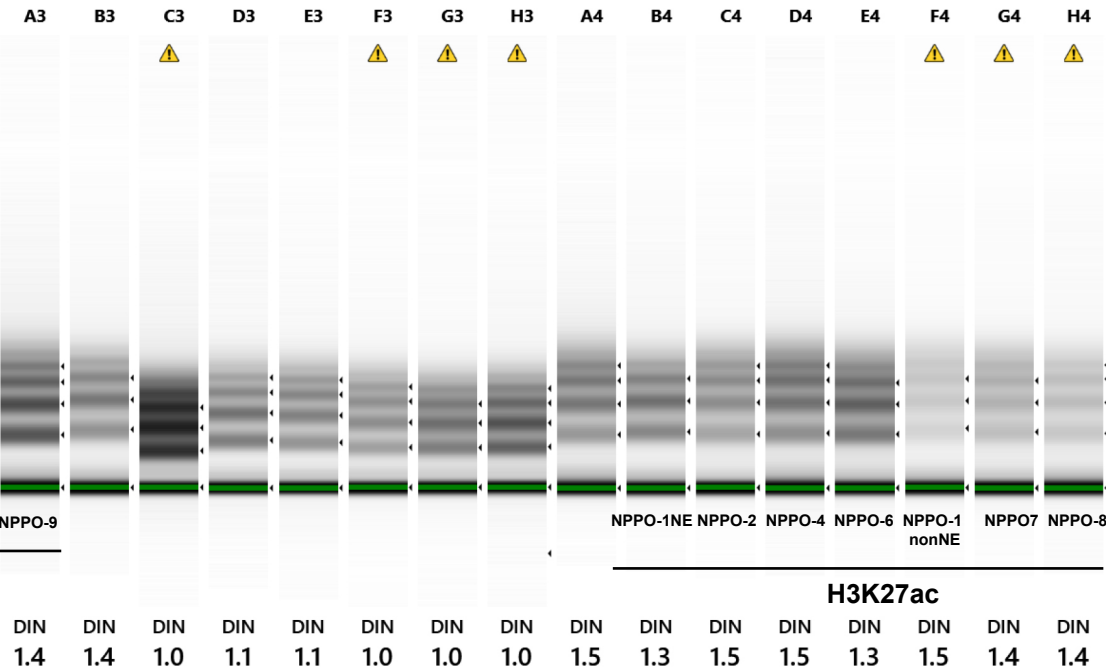


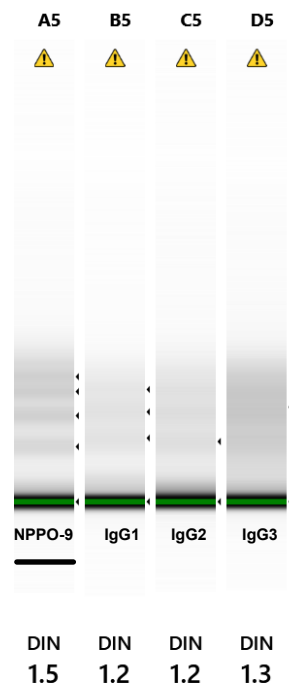
Filename: LibraryQC_1-35_30-1125610508.cgDNA



Default image (Contrast 100%)



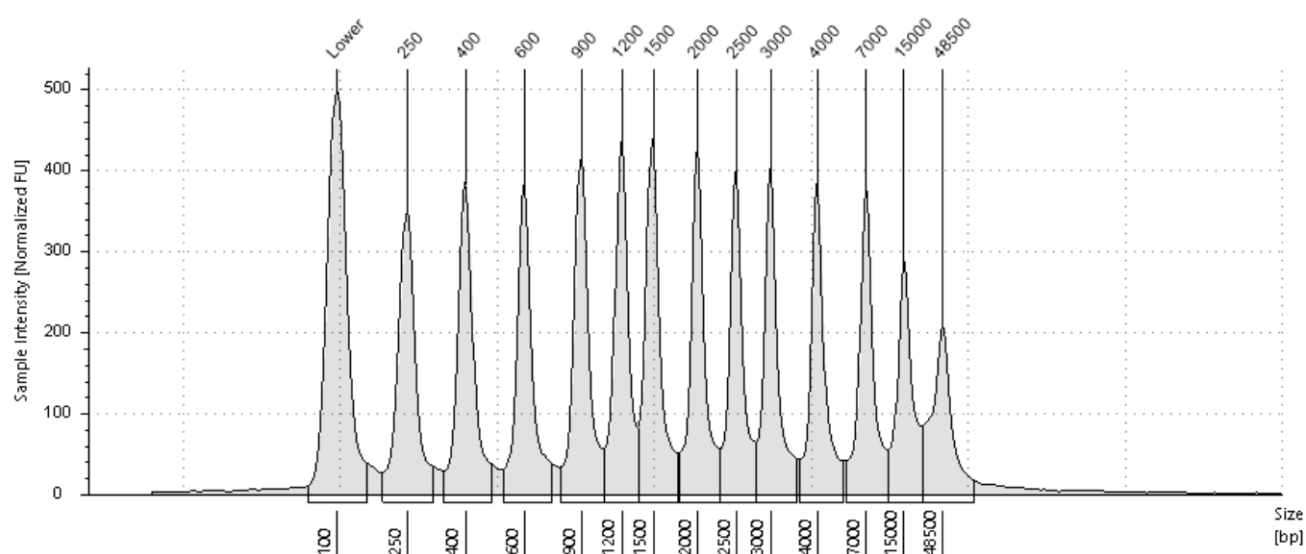
Default image (Contrast 100%)



Default image (Contrast 100%)

Sample Info

Well	DIN	Conc. [ng/ul]	Sample Description
A1	-	64.4	Ladder
B1	1.1	14.2	LGM38547
C1	1.1	18.7	LGM38548
D1	1.0	21.2	LGM38549
E1	1.0	22.6	LGM38550
F1	1.3	7.38	LGM38551
G1	1.2	10.6	LGM38552
H1	1.1	11.0	LGM38553
A2	1.2	8.81	LGM38554
B2	1.3	16.8	LGM38555
C2	1.4	25.4	LGM38556
D2	1.2	23.9	LGM38557
E2	1.3	23.6	LGM38558
F2	1.3	19.9	LGM38559
G2	1.4	18.9	LGM38560
H2	1.3	19.7	LGM38561
A3	1.4	17.7	LGM38562
B3	1.4	11.7	LGM38563
C3	1.0	28.7	LGM38564
D3	1.1	12.6	LGM38565
E3	1.1	11.9	LGM38566
F3	1.0	11.1	LGM38567
G3	1.0	13.4	LGM38568
H3	1.0	16.7	LGM38569
A4	1.5	13.4	LGM38570
B4	1.3	12.6	LGM38571
C4	1.5	11.2	LGM38572
D4	1.5	14.3	LGM38573
E4	1.3	15.8	LGM38574
F4	1.5	6.08	LGM38575
G4	1.4	7.87	LGM38576
H4	1.4	6.48	LGM38577
A5	1.5	5.30	LGM38578
B5	1.2	3.29	LGM38579
C5	1.2	3.62	LGM38580
D5	1.3	6.80	LGM38581

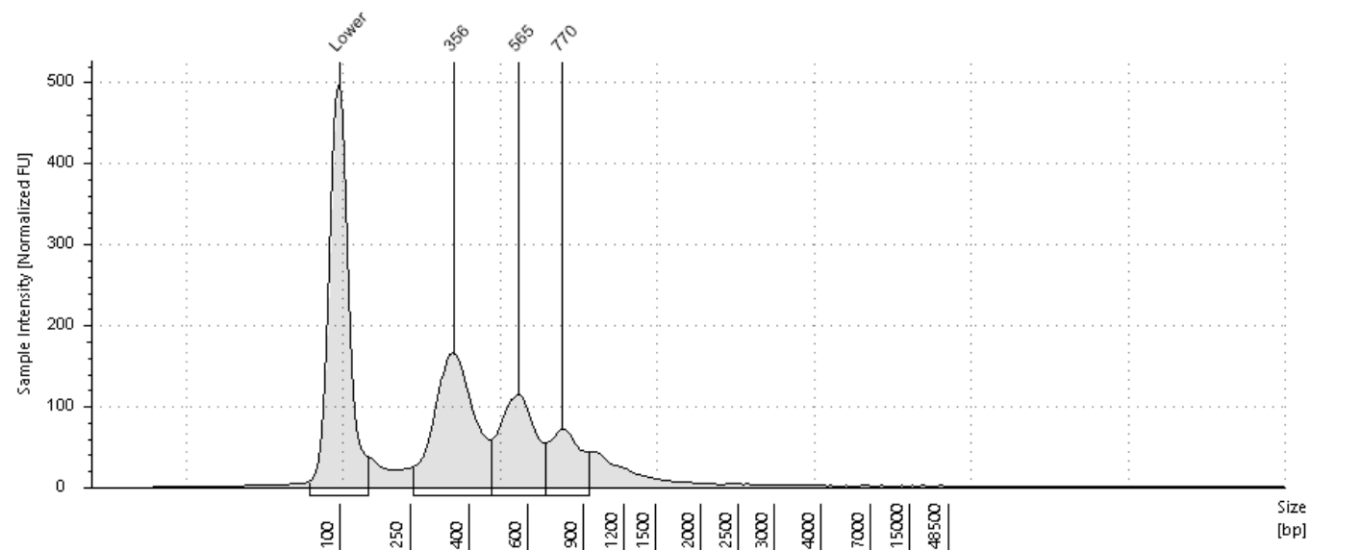
A1: Ladder**Sample Table**

Well	DIN	Conc. [ng/μl]	Sample Description
A1	-	64.4	Ladder

Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	69	148		Lower Marker
250	5.10	-	8.19	180	307		
400	5.25	-	8.42	333	479		
600	5.08	-	8.15	518	725		
900	5.29	-	8.49	772	1058		
1200	5.22	-	8.38	1058	1348		
1500	5.45	-	8.75	1348	1768		
2000	5.11	-	8.20	1783	2277		
2500	4.67	-	7.50	2277	2766		
3000	4.85	-	7.78	2766	3517		
4000	4.54	-	7.28	3571	5370		
7000	4.52	-	7.25	5531	11058		
15000	3.69	-	5.92	11058	21959		
48500	3.54	-	5.69	21959	75516		

B1: LGM38547

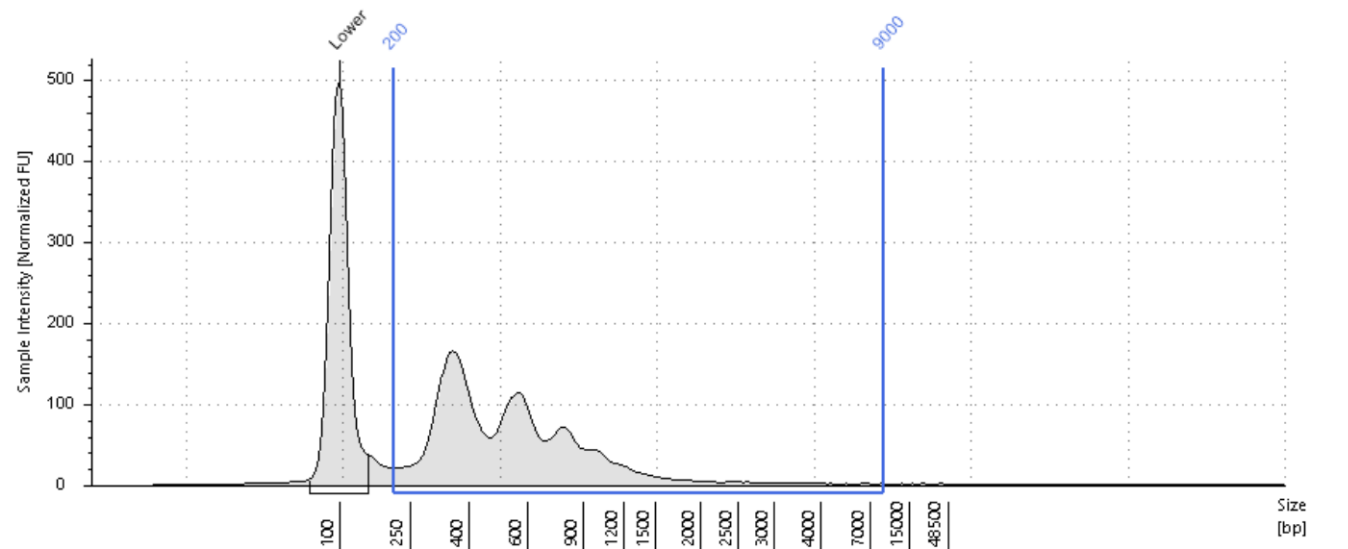


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
B1	1.1	14.2	LGM38547

Peak Table

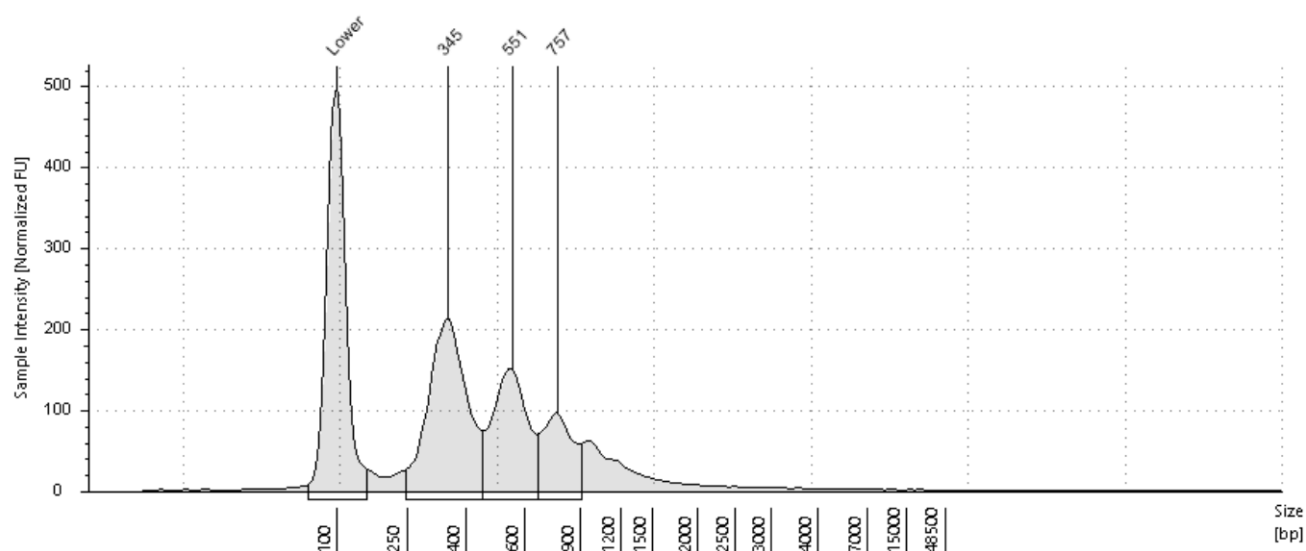
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	67	146		Lower Marker
356	5.84	-	50.87	257	466		
565	3.64	-	31.68	466	684		
770	2.00	-	17.45	684	933		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
200	9000	658	13.5	43.9	95.06		

C1: LGM38548

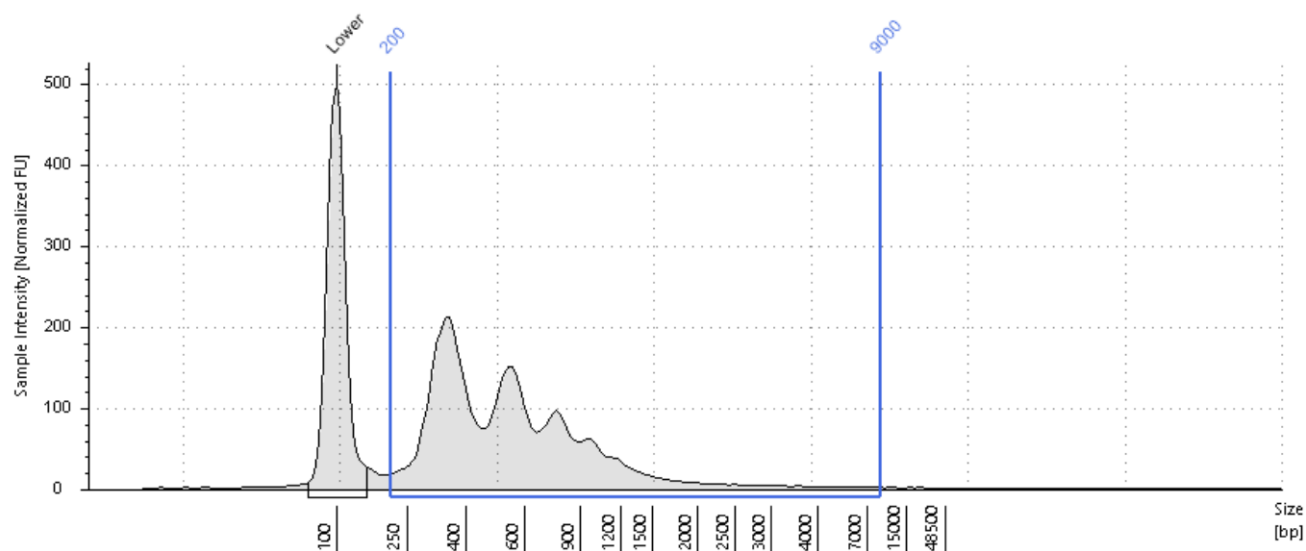


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
C1	1.1	18.7	LGM38548

Peak Table

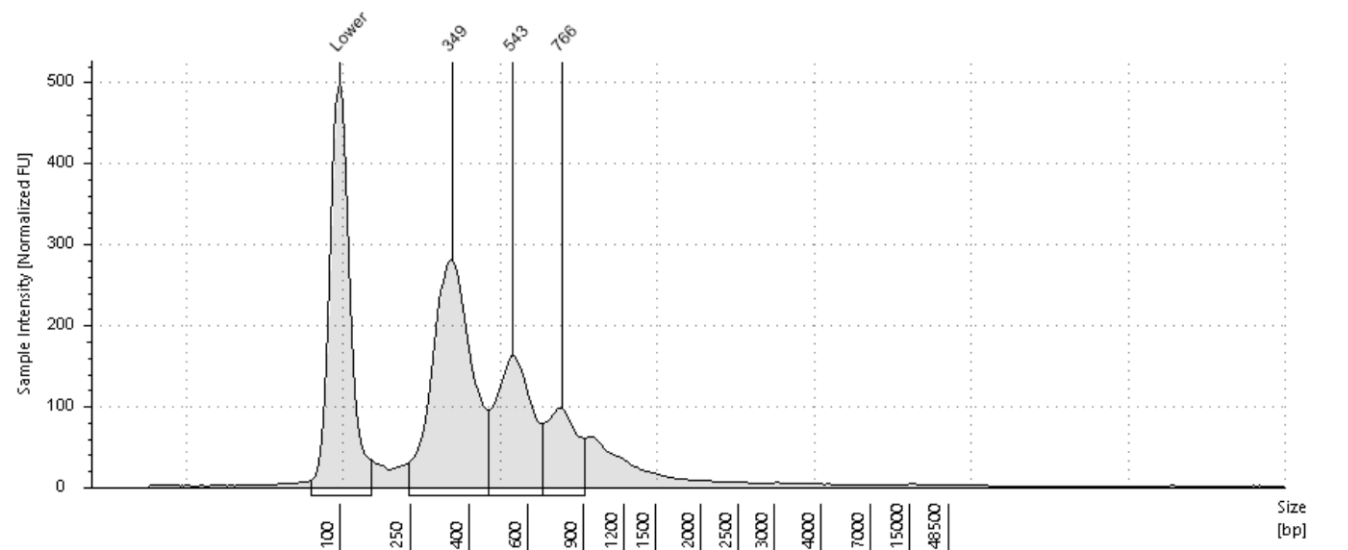
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	146		Lower Marker
345	7.43	-	49.84	245	451		
551	4.77	-	31.97	451	660		
757	2.71	-	18.19	660	902		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
200	9000	678	17.9	57.5	95.74		

D1: LGM38549

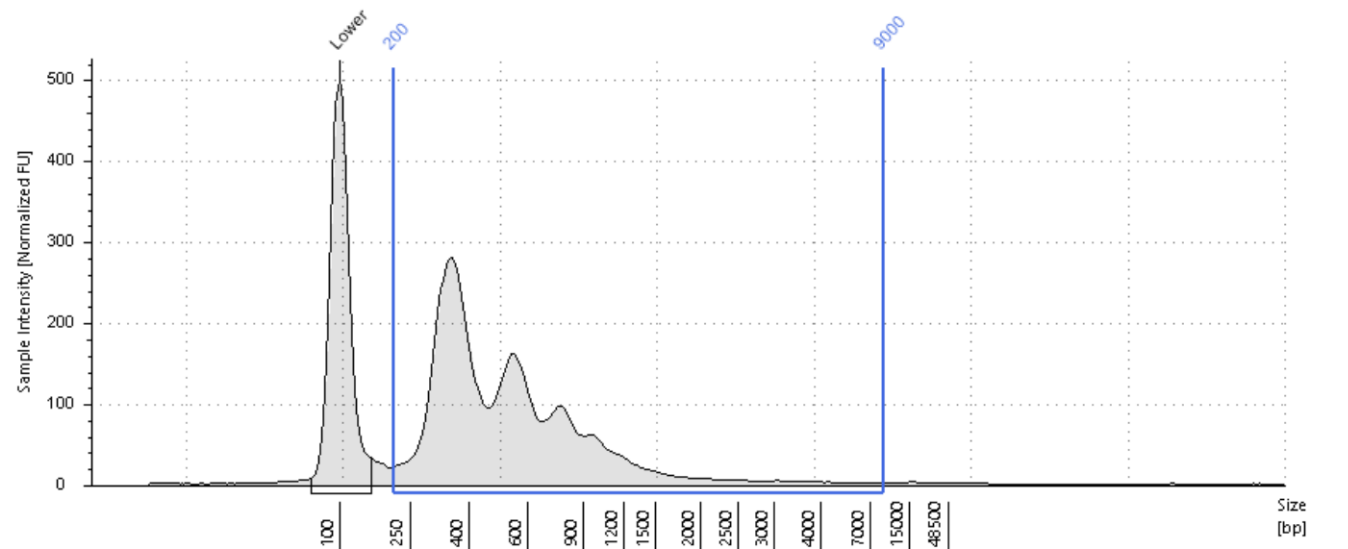


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
D1	1.0	21.2	LGM38549

Peak Table

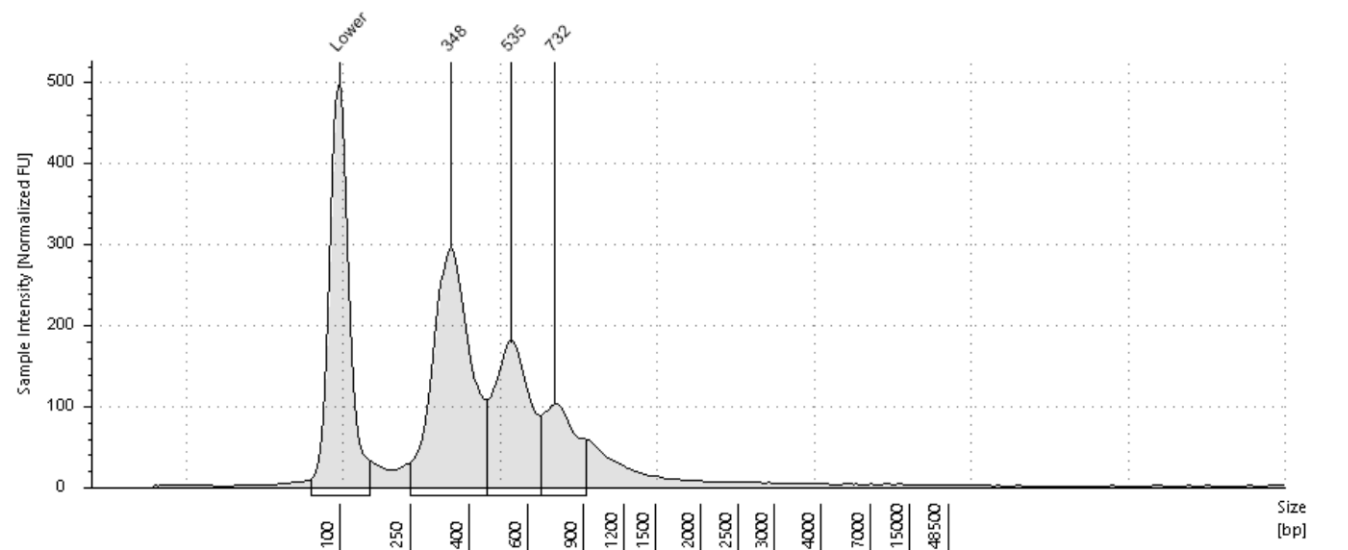
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	149		Lower Marker
349	9.55	-	55.64	245	459		
543	4.97	-	28.96	459	667		
766	2.64	-	15.39	667	903		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
200	9000	655	20.2	66.9	95.08		

E1: LGM38550

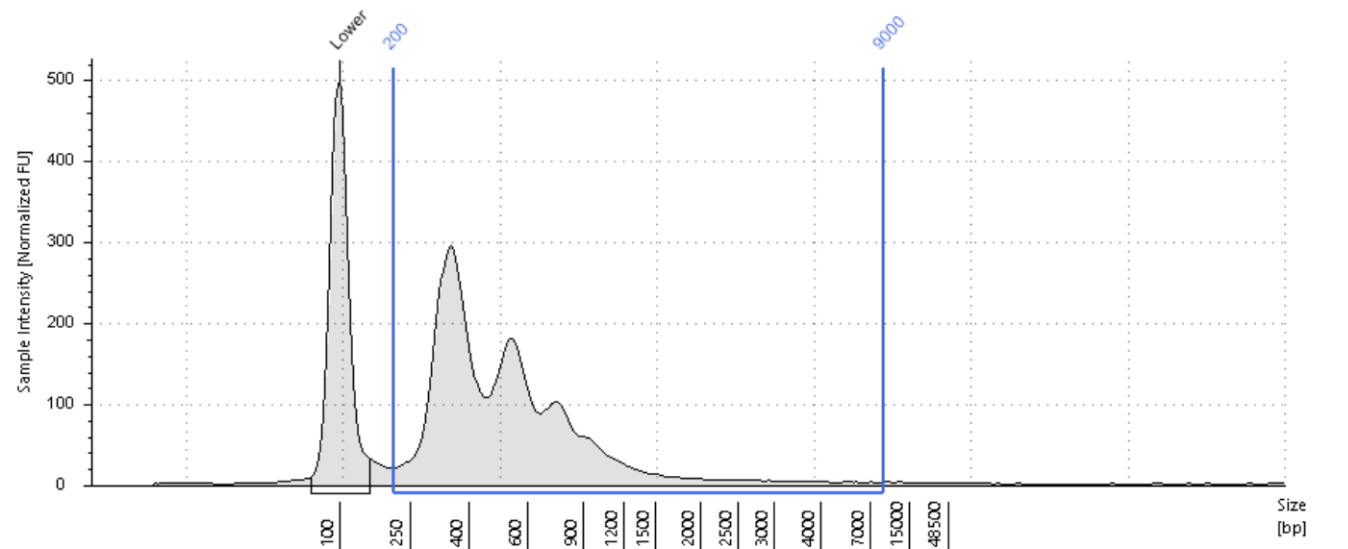


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
E1	1.0	22.6	LGM38550

Peak Table

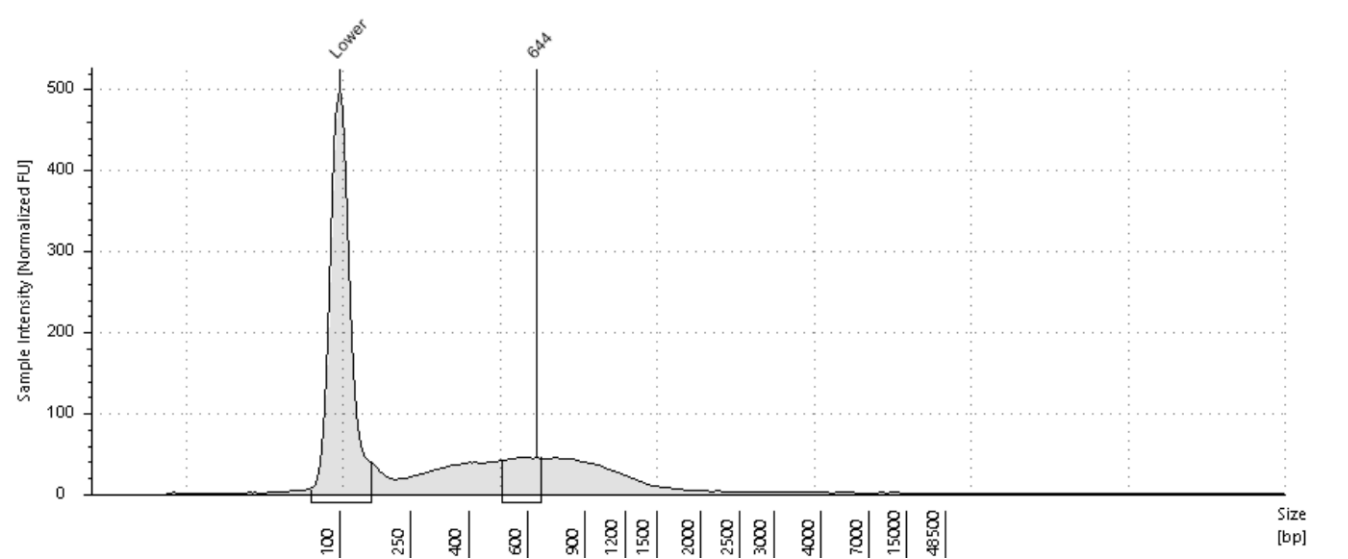
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	146		Lower Marker
348	9.89	-	53.10	248	453		
535	5.79	-	31.07	453	662		
732	2.95	-	15.83	662	912		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
200	9000	645	21.3	71.1	94.08		

F1: LGM38551

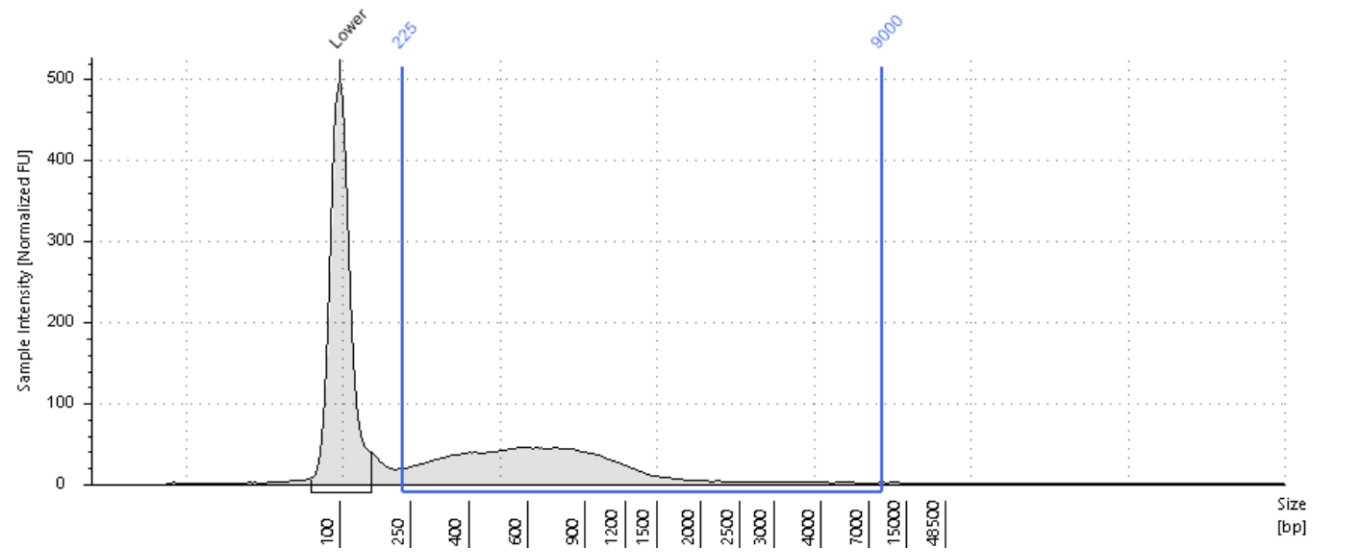


Sample Table

Well	DIN	Conc. [ng/ul]	Sample Description
F1	1.3	7.38	LGM38551

Peak Table

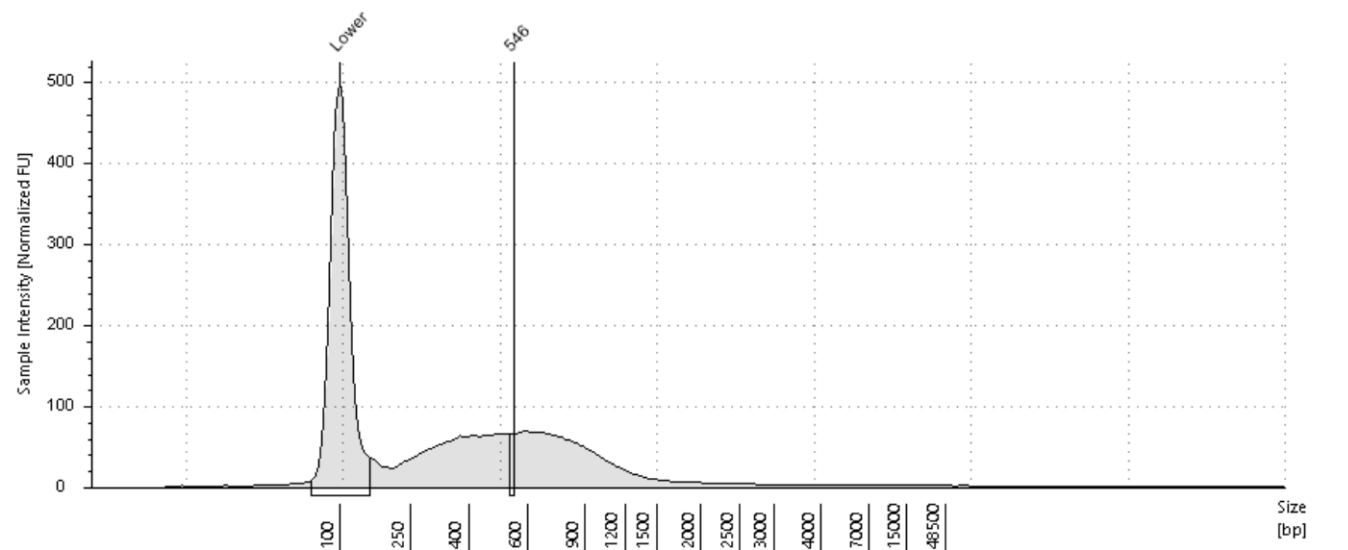
Size [bp]	Calibrated Conc. [ng/ul]	Assigned Conc. [ng/ul]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	69	150		Lower Marker
644	1.29	-	100.00	504	662		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/ul]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	833	6.70	19.2	90.73		

G1: LGM38552

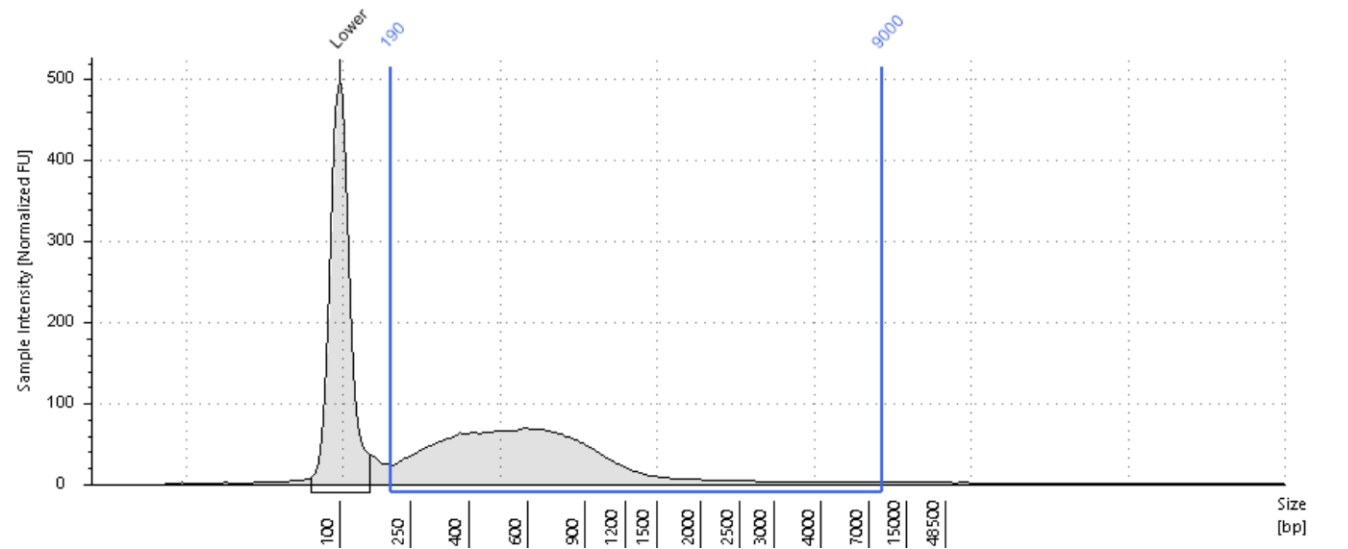


Sample Table

Well	DIN	Conc. [ng/ul]	Sample Description
G1	1.2	10.6	LGM38552

Peak Table

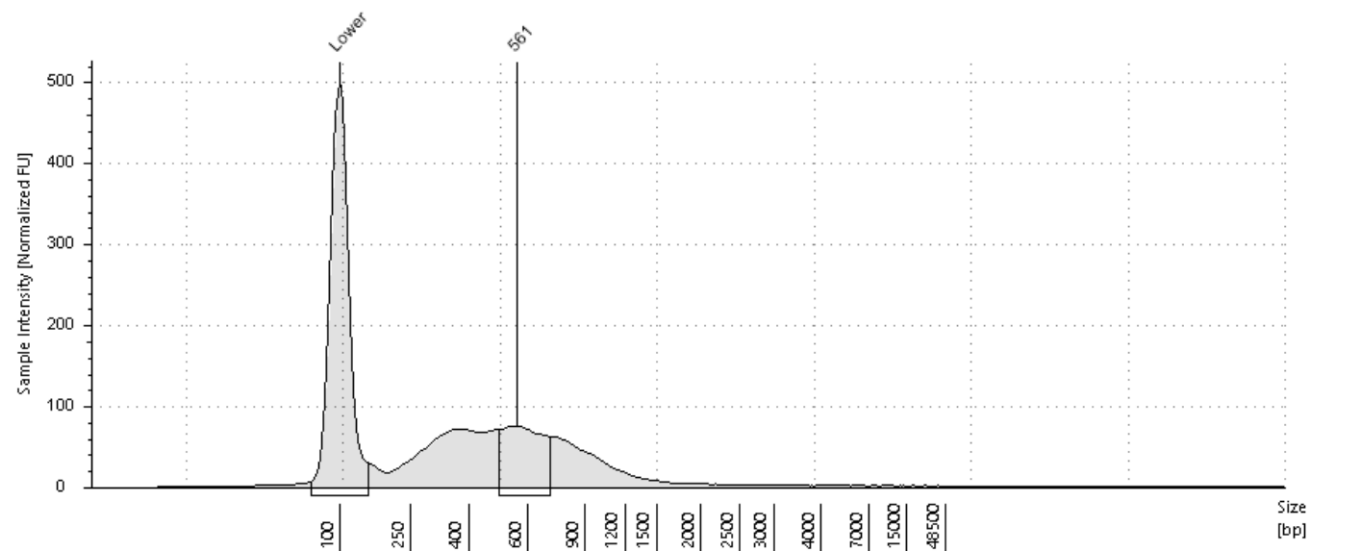
Size [bp]	Calibrated Conc. [ng/ul]	Assigned Conc. [ng/ul]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	69	148		Lower Marker
546	0.314	-	100.00	528	546		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/ul]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
190	9000	757	10.0	31.7	94.76		<div></div>

H1: LGM38553

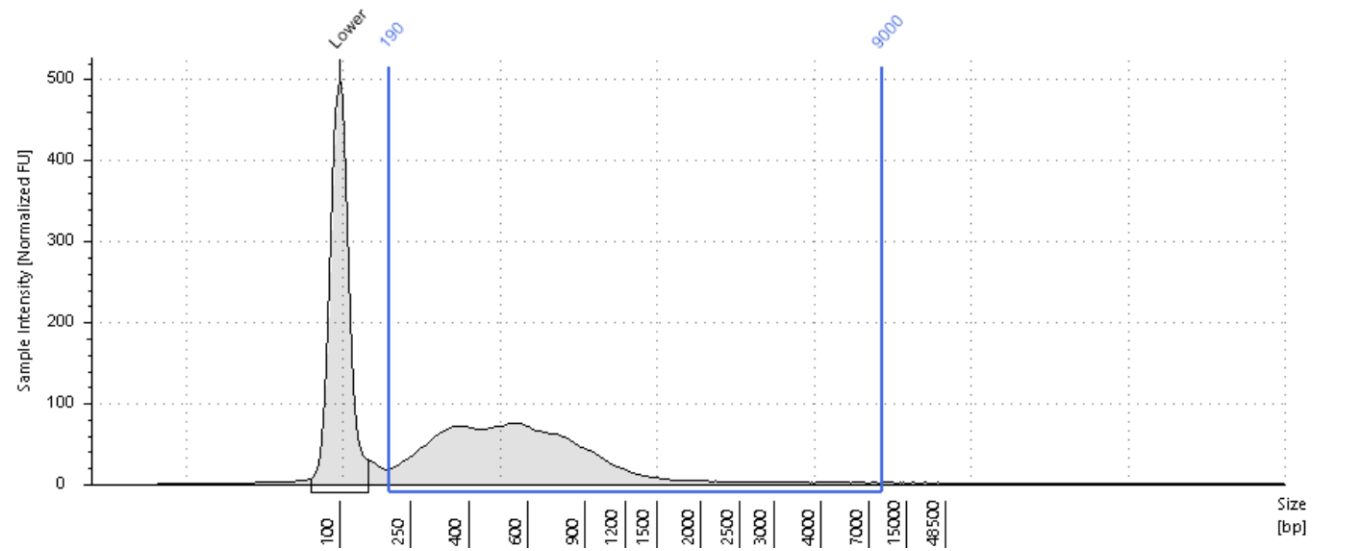


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
H1	1.1	11.0	LGM38553

Peak Table

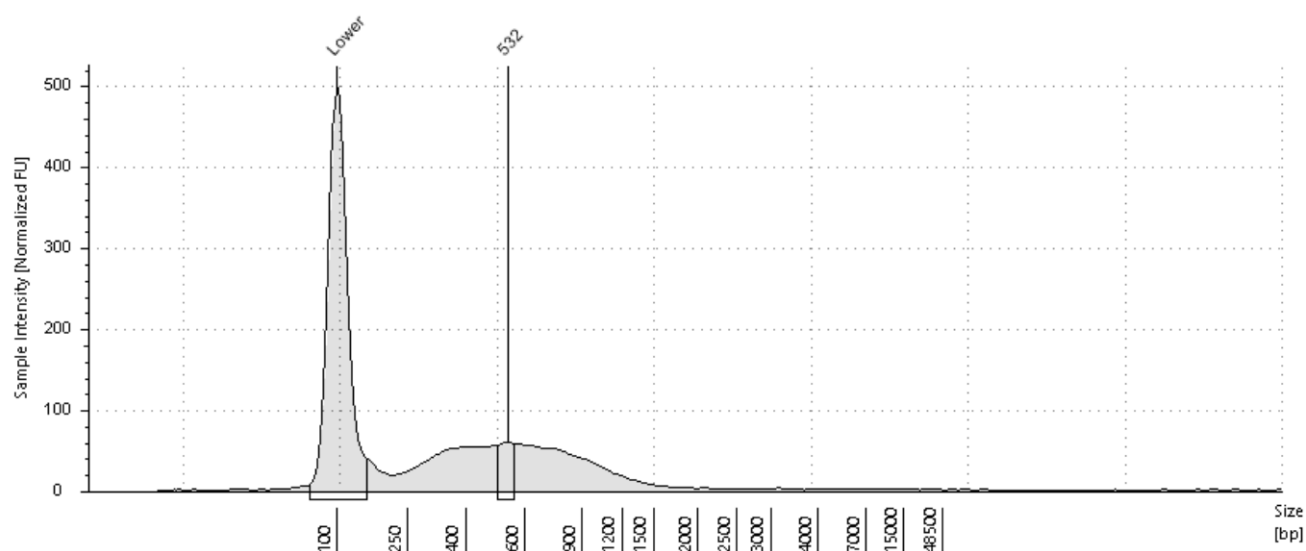
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	69	146		Lower Marker
561	2.92	-	100.00	493	708		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
190	9000	698	10.5	34.3	95.63		

A2: LGM38554

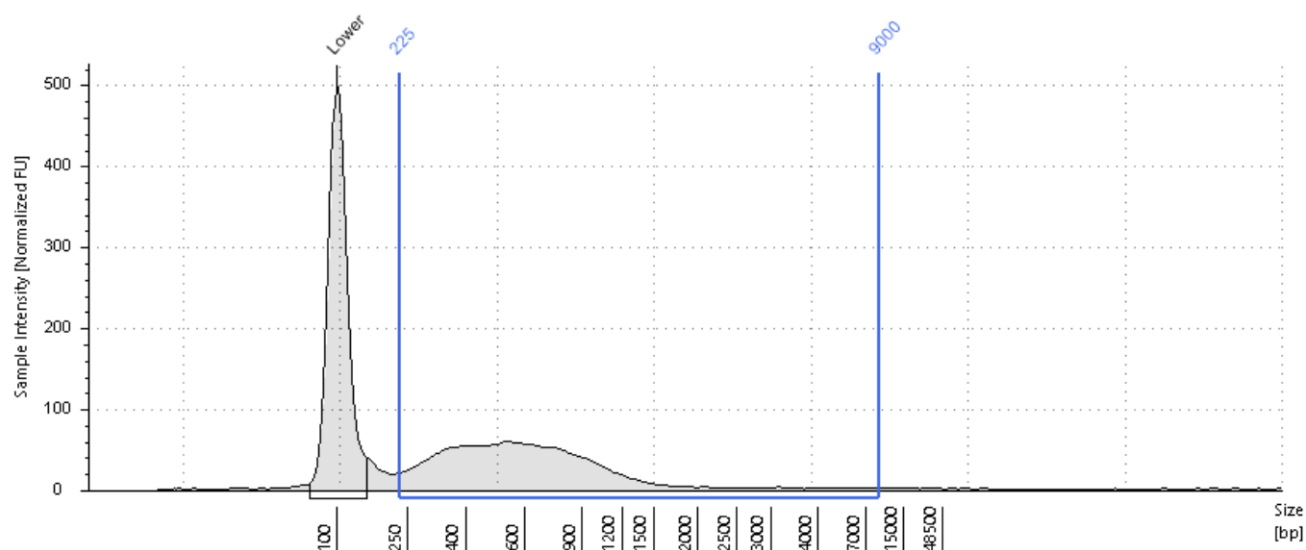


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
A2	1.2	8.81	LGM38554

Peak Table

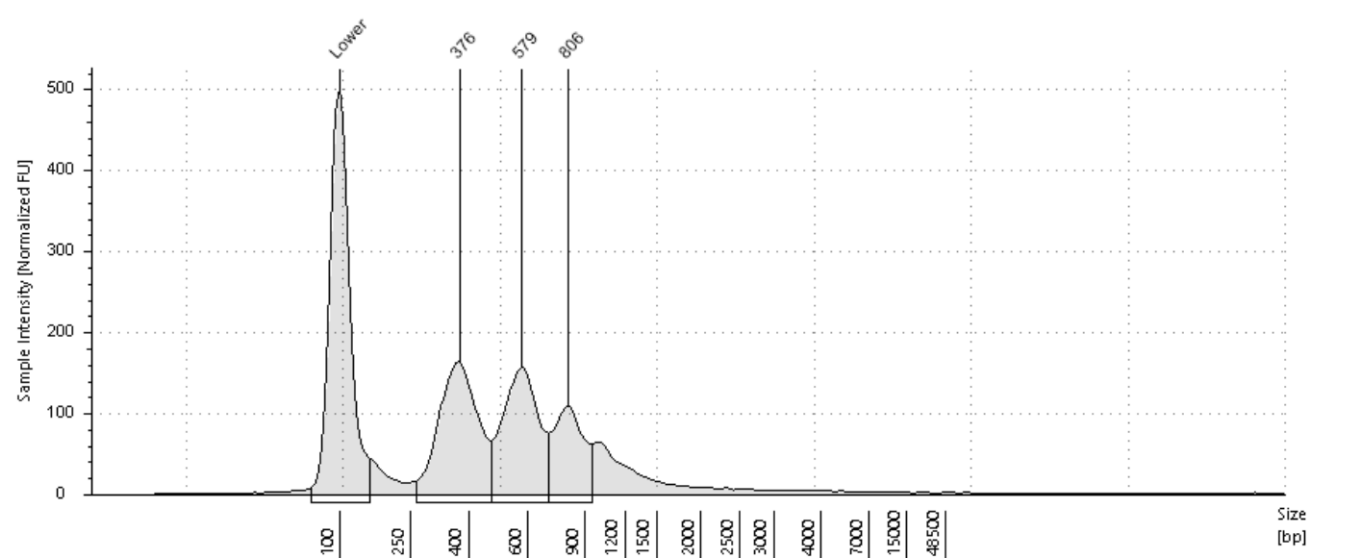
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	70	148		Lower Marker
532	0.762	-	100.00	497	556		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	774	7.95	24.5	90.25		

B2: LGM38555

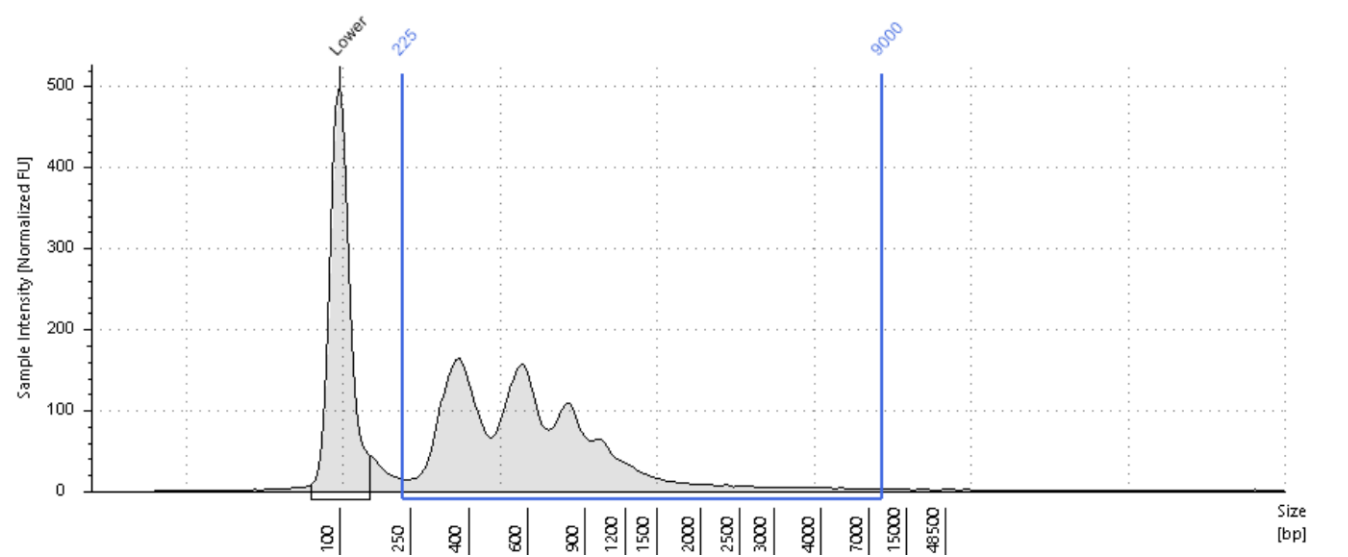


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
B2	1.3	16.8	LGM38555

Peak Table

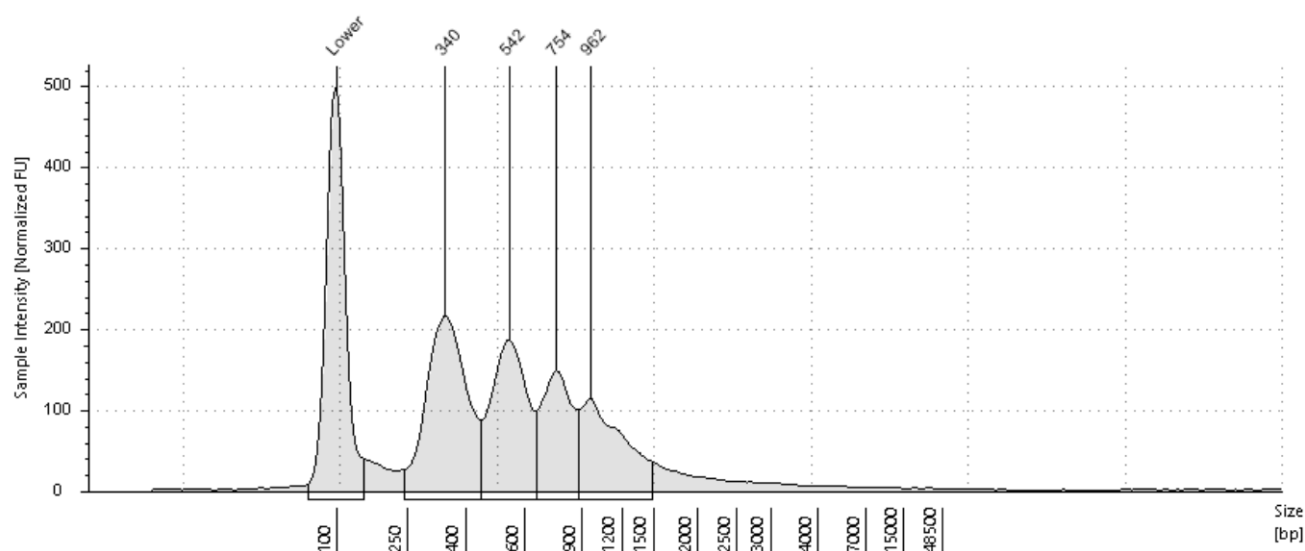
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	69	148		Lower Marker
376	5.50	-	41.87	263	471		
579	4.81	-	36.62	471	698		
806	2.82	-	21.51	698	948		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	757	15.9	45.5	94.26		

C2: LGM38556

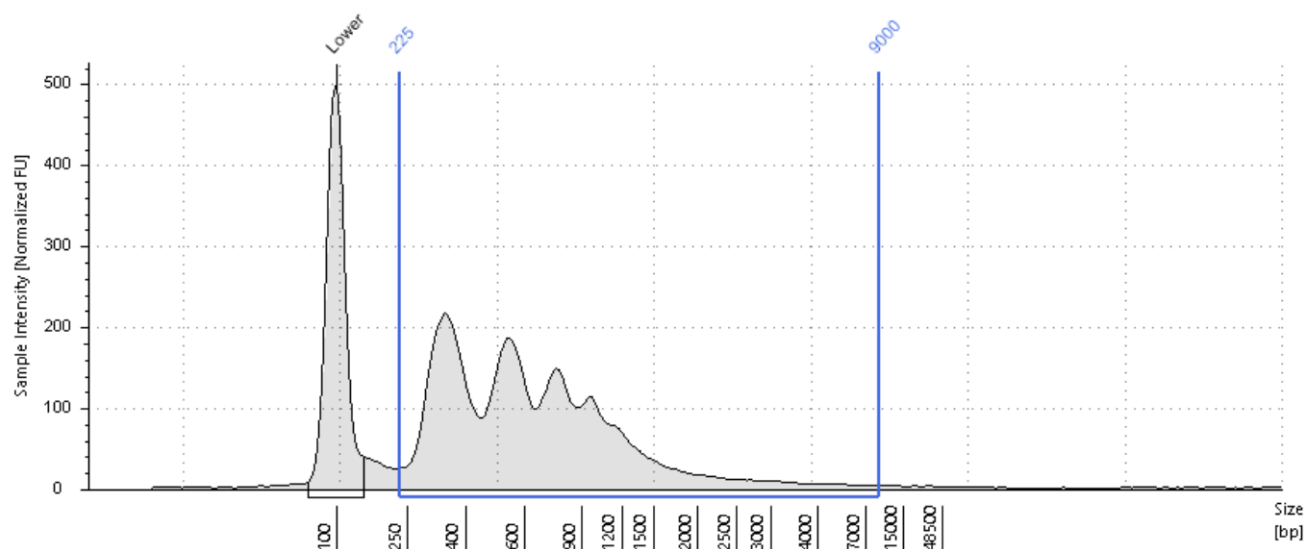


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
C2	1.4	25.4	LGM38556

Peak Table

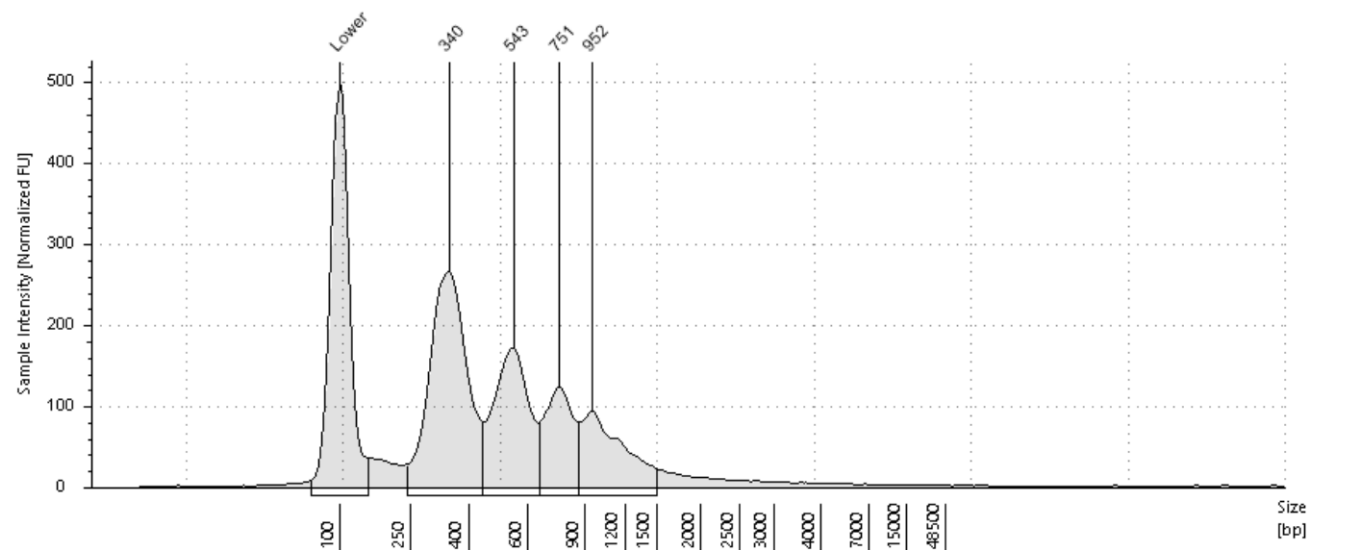
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	69	143		Lower Marker
340	7.79	-	34.82	242	445		
542	6.07	-	27.12	445	653		
754	4.09	-	18.26	653	879		
962	4.43	-	19.80	879	1493		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	810	24.1	69.4	94.98		

D2: LGM38557

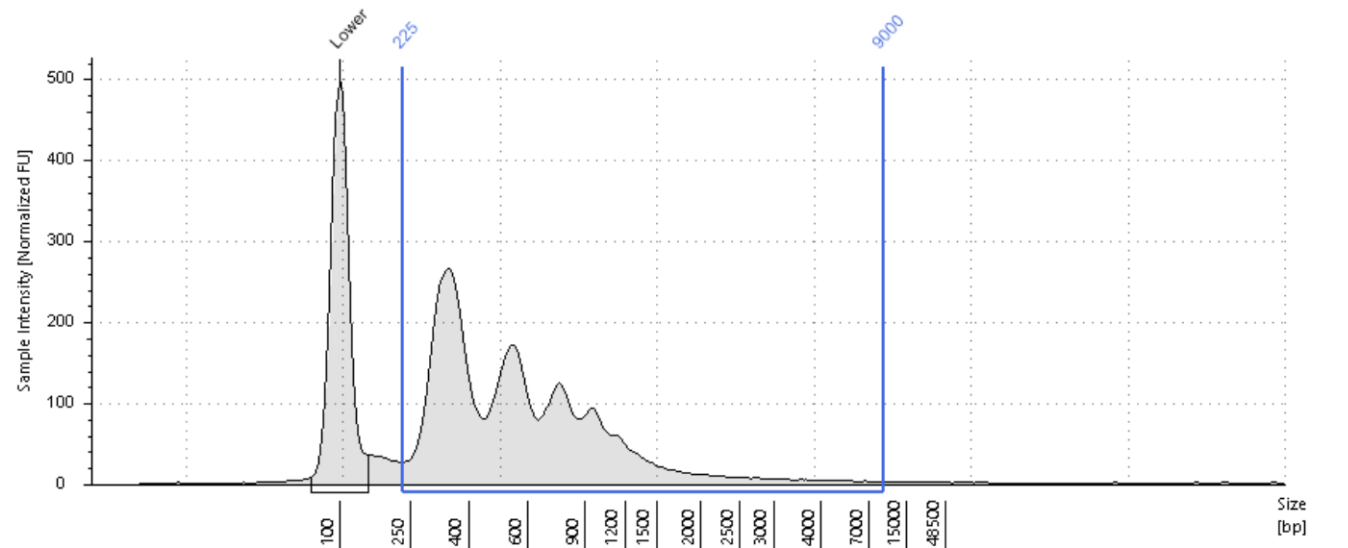


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
D2	1.2	23.9	LGM38557

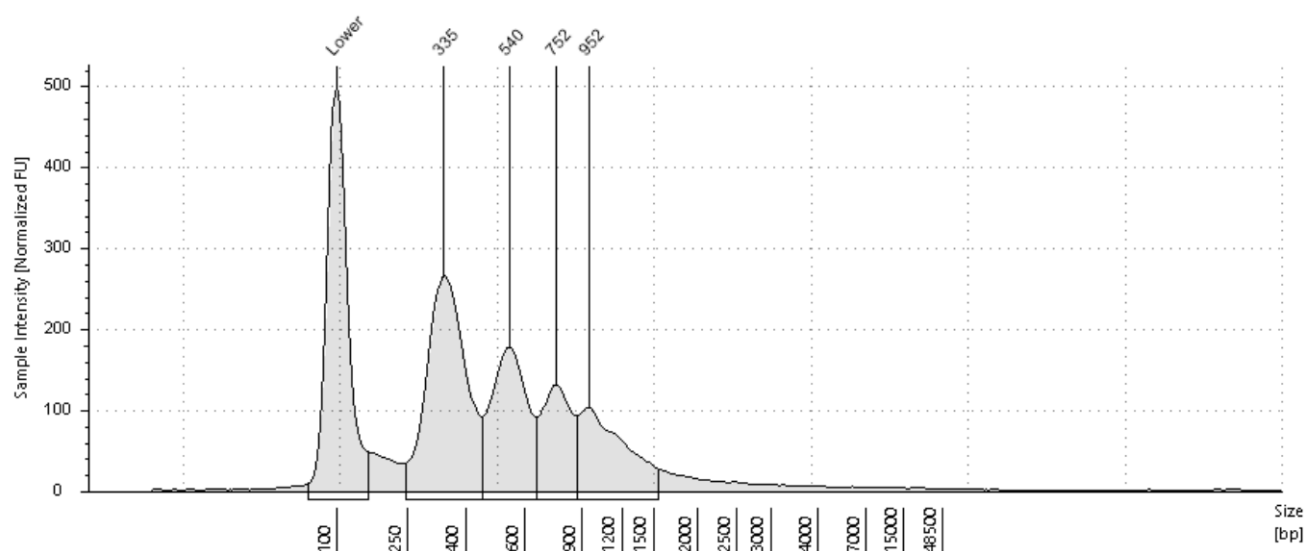
Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	144		Lower Marker
340	9.05	-	42.43	236	441		
543	5.50	-	25.77	441	649		
751	3.22	-	15.08	649	861		
952	3.57	-	16.72	861	1497		



Region Table

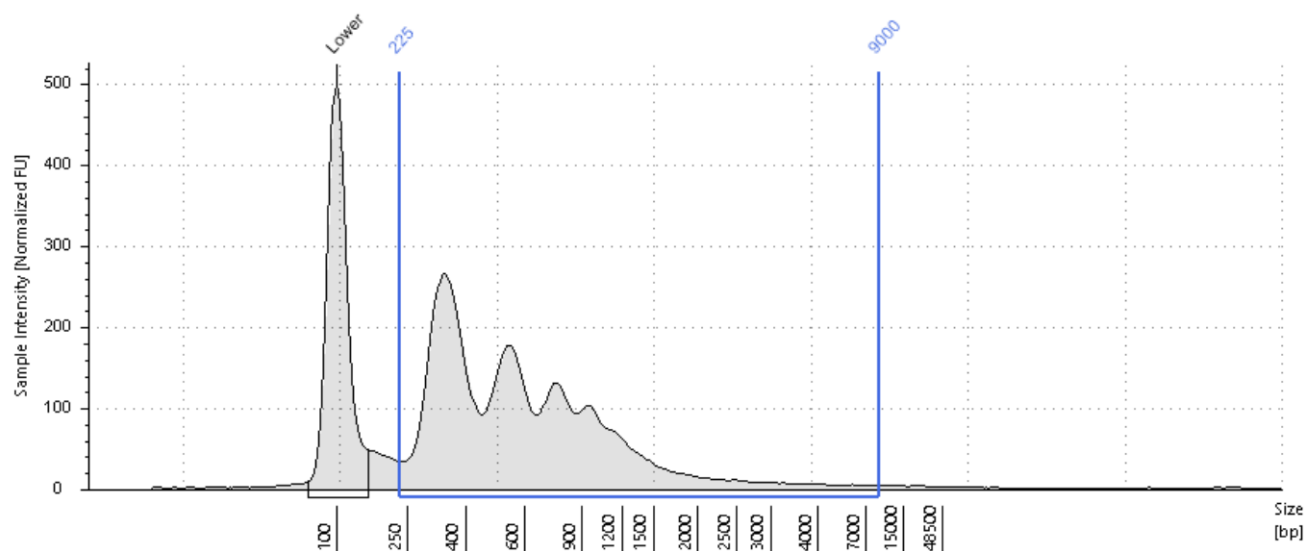
From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	716	22.5	70.2	94.02		

E2: LGM38558**Sample Table**

Well	DIN	Conc. [ng/μl]	Sample Description
E2	1.3	23.6	LGM38558

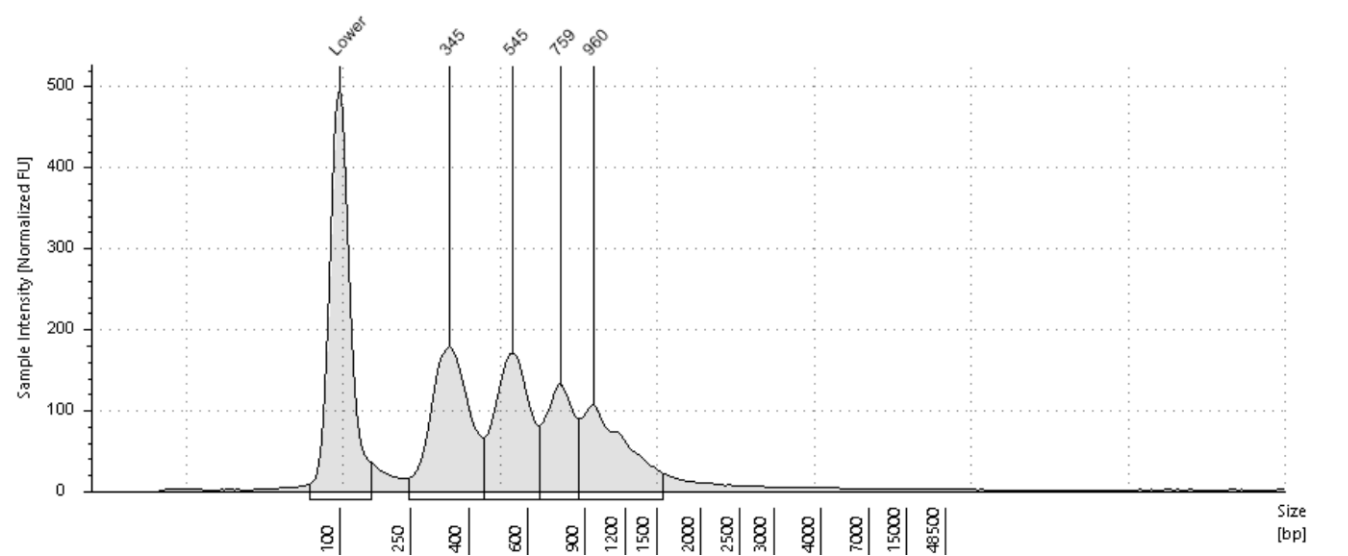
Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	70	151		Lower Marker
335	8.61	-	40.78	247	450		
540	5.32	-	25.17	450	656		
752	3.32	-	15.70	656	877		
952	3.88	-	18.35	877	1557		

**Region Table**

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	760	22.4	68.2	94.94		

F2: LGM38559

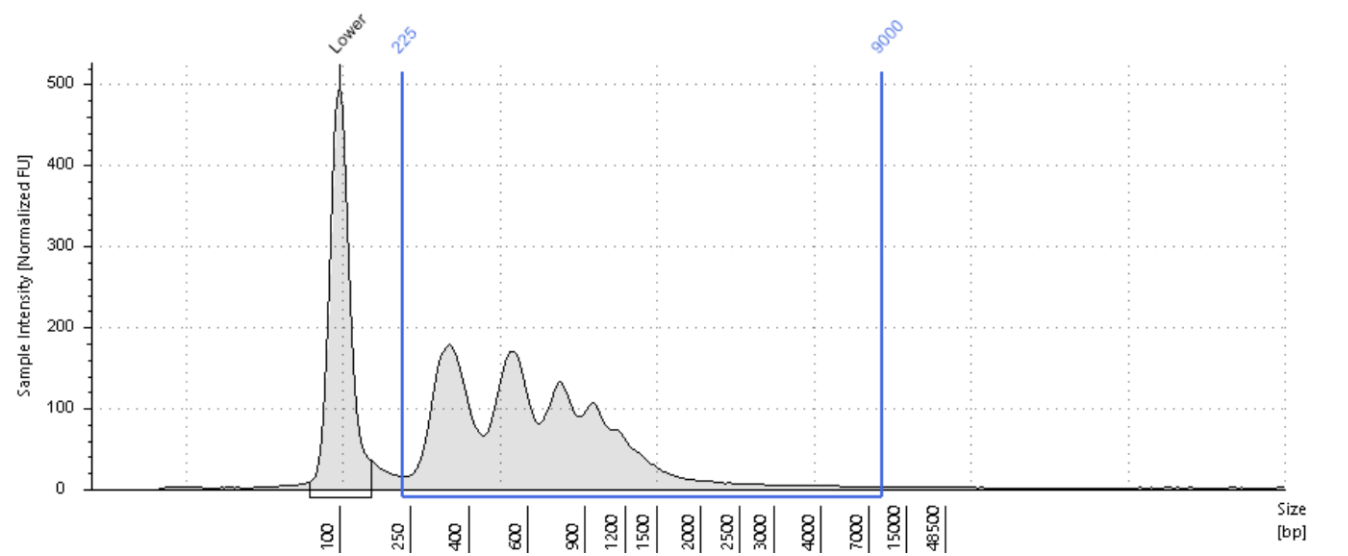


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
F2	1.3	19.9	LGM38559

Peak Table

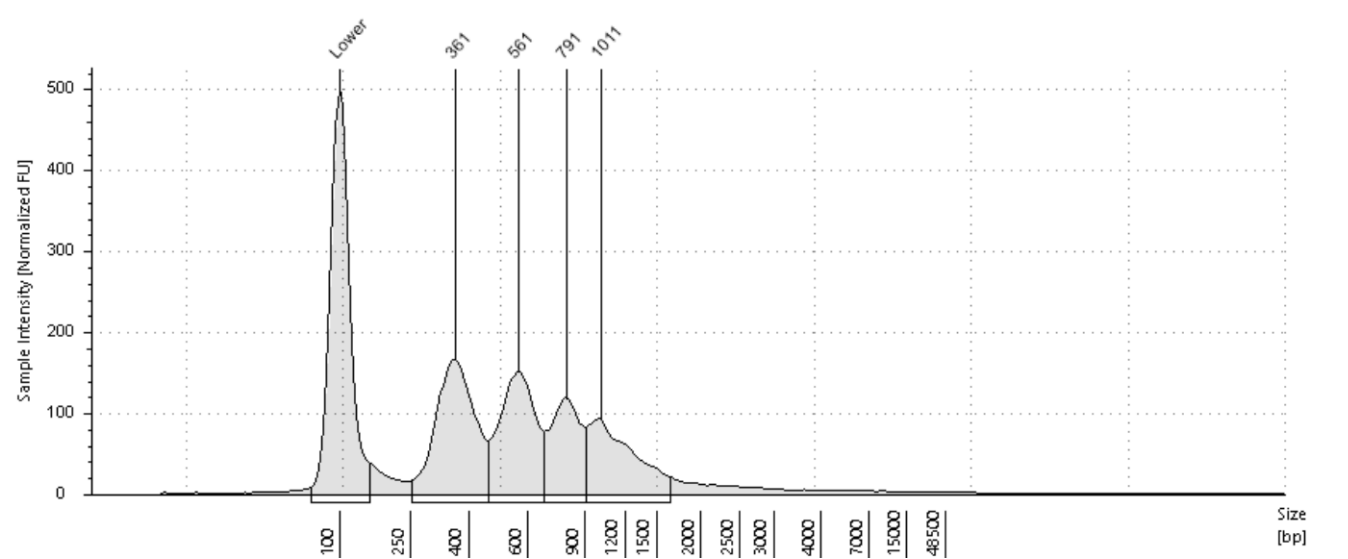
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	151		Lower Marker
345	5.81	-	31.90	247	446		
545	5.10	-	27.97	446	656		
759	3.23	-	17.74	656	869		
960	4.08	-	22.39	869	1570		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	774	19.0	54.1	95.60		

G2: LGM38560

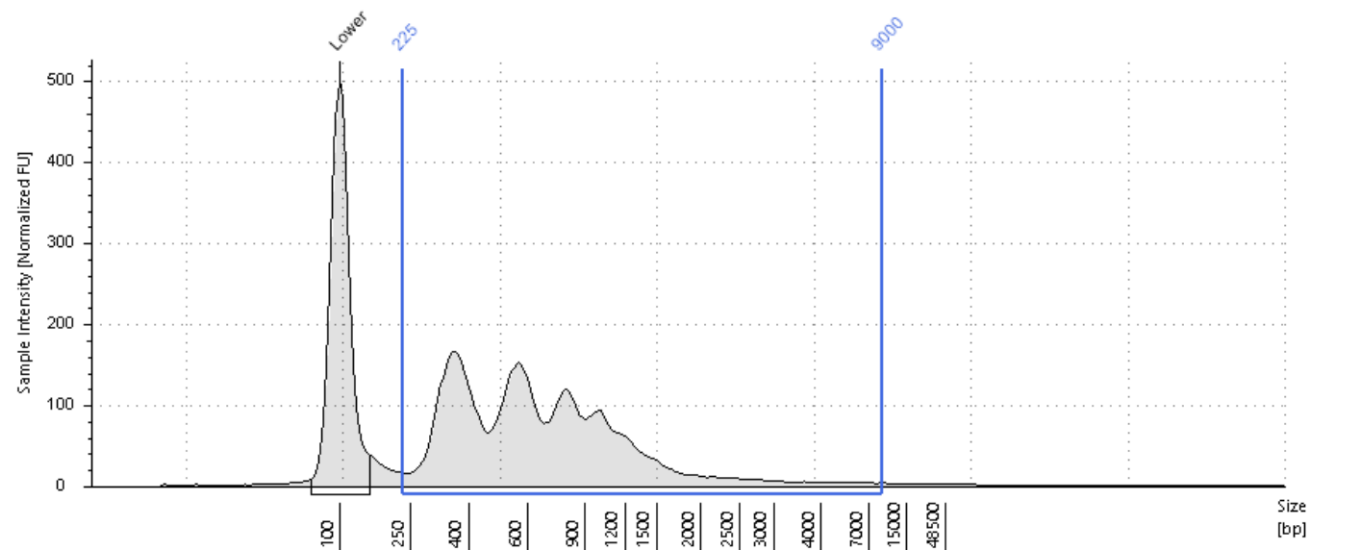


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
G2	1.4	18.9	LGM38560

Peak Table

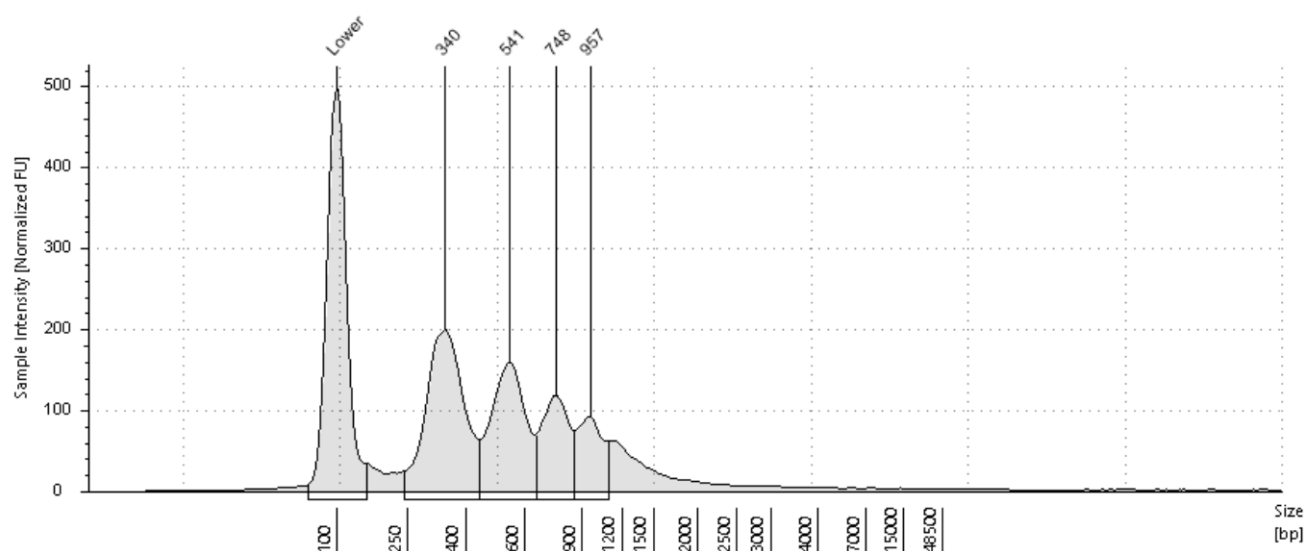
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	149		Lower Marker
361	5.63	-	32.77	254	460		
561	4.74	-	27.59	460	678		
791	3.18	-	18.49	678	915		
1011	3.64	-	21.15	915	1647		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	821	18.1	50.1	95.67		

H2: LGM38561

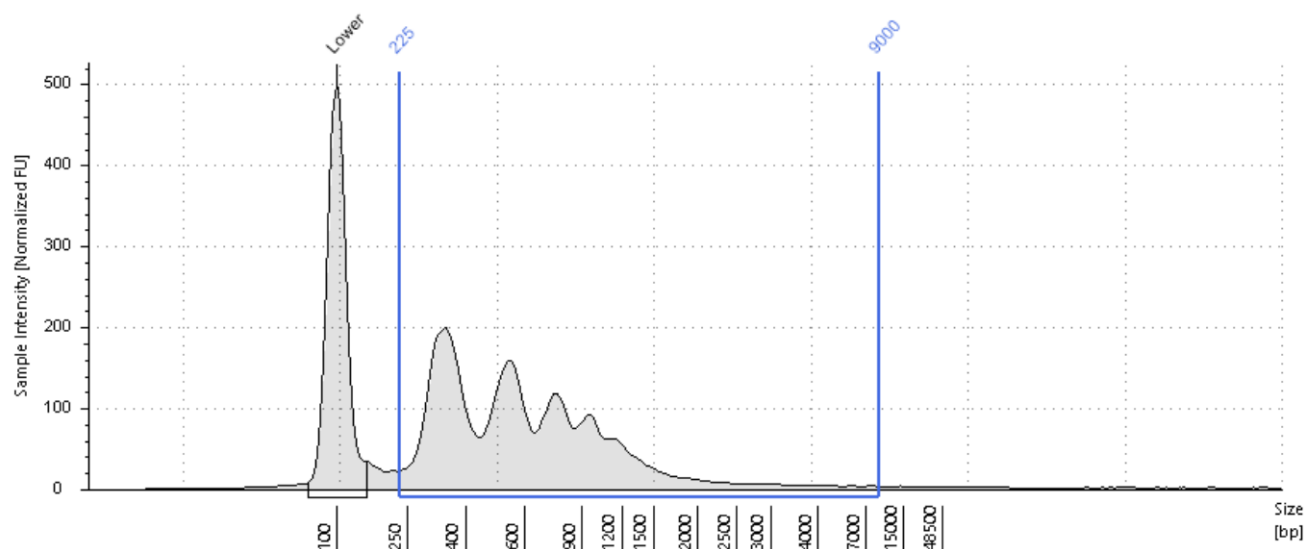


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
H2	1.3	19.7	LGM38561

Peak Table

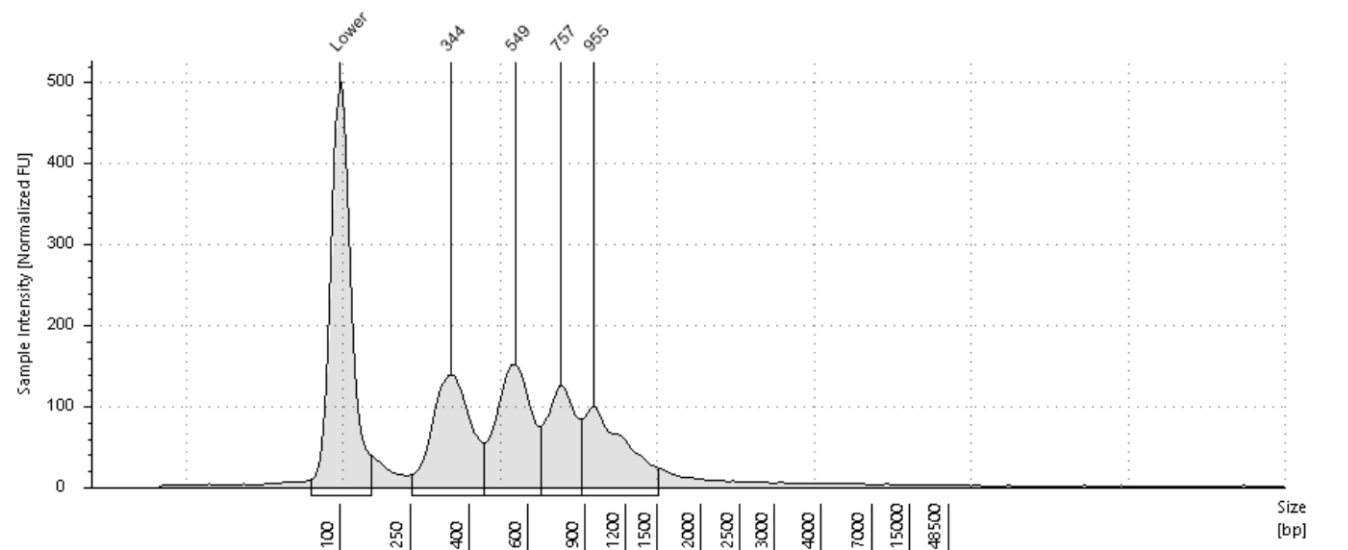
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	146		Lower Marker
340	6.54	-	39.97	241	438		
541	4.85	-	29.64	438	652		
748	2.87	-	17.56	652	858		
957	2.10	-	12.83	858	1097		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	760	18.8	56.7	95.36		

A3: LGM38562

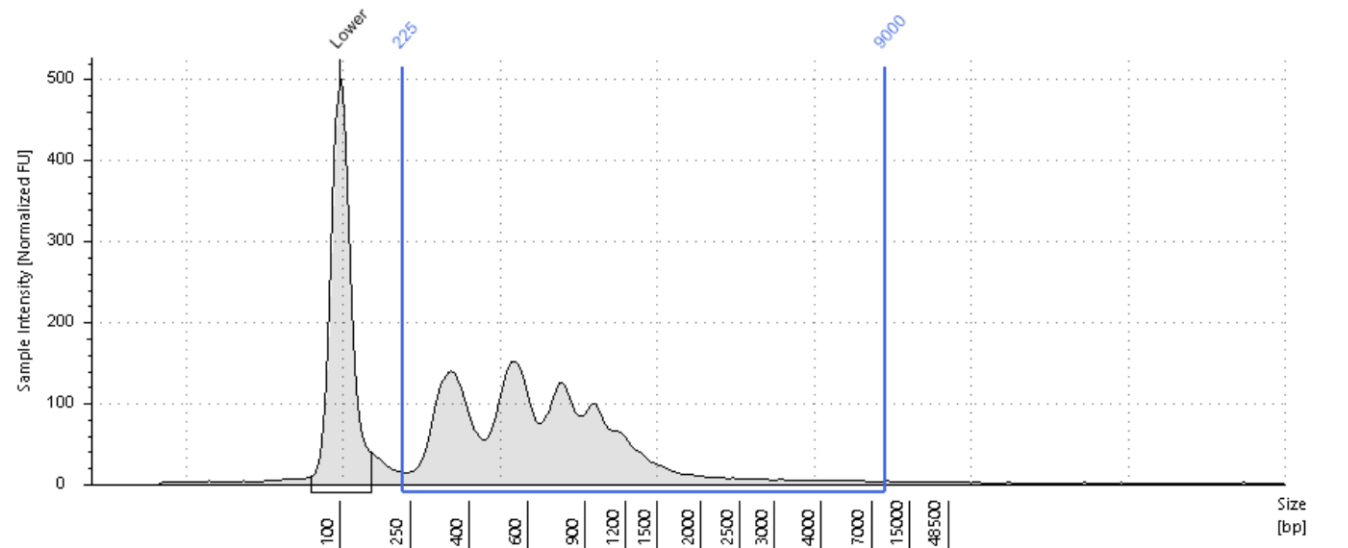


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
A3	1.4	17.7	LGM38562

Peak Table

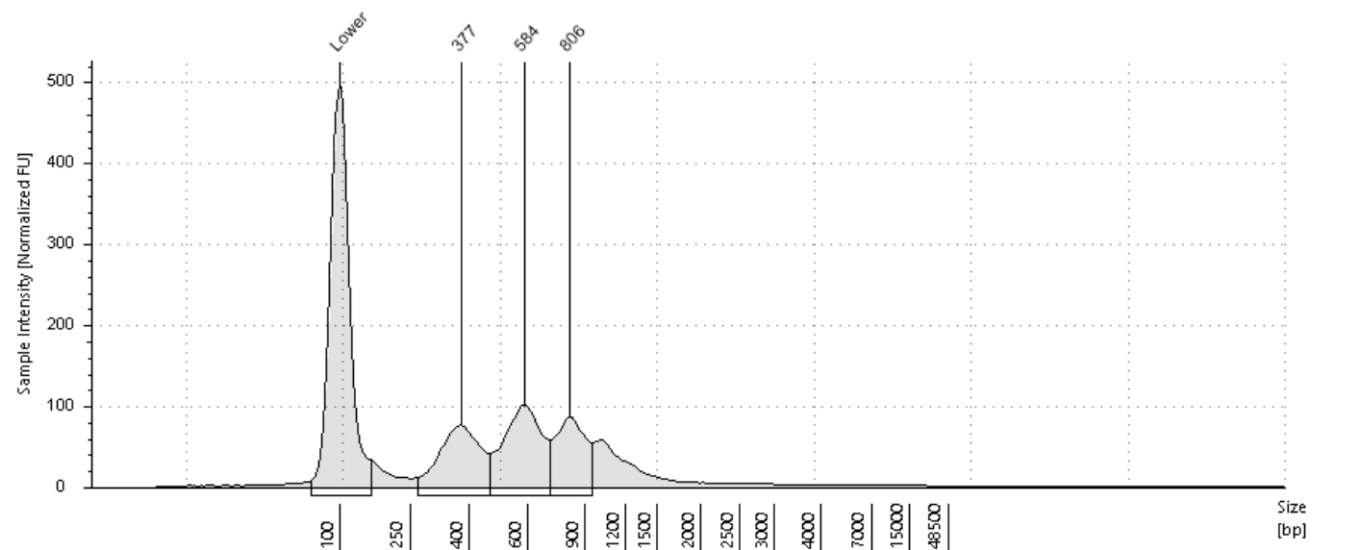
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	151		Lower Marker
344	4.46	-	28.60	252	441		
549	4.50	-	28.88	441	656		
757	3.09	-	19.81	656	873		
955	3.54	-	22.71	873	1515		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	810	16.5	45.4	93.57		

B3: LGM38563

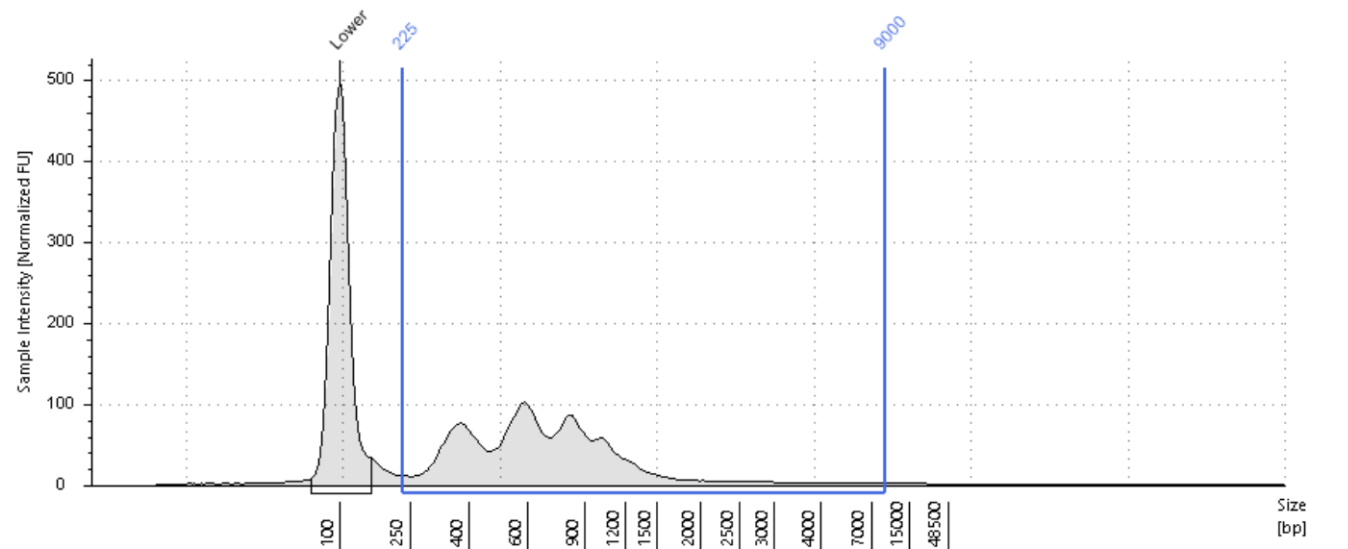


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
B3	1.4	11.7	LGM38563

Peak Table

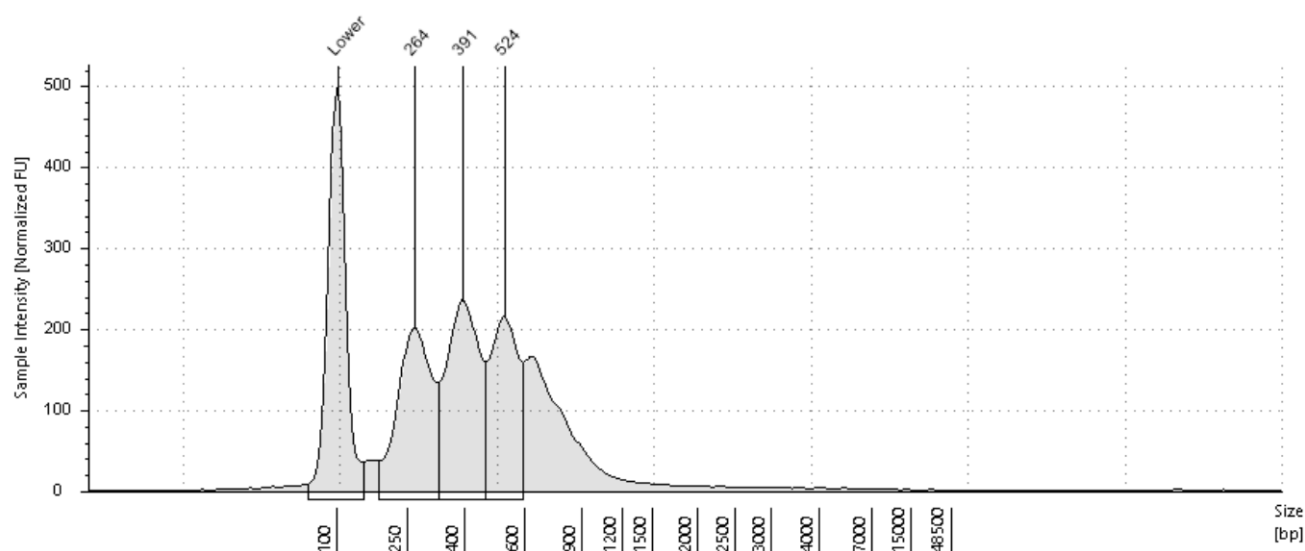
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	149		Lower Marker
377	2.73	-	32.00	265	461		
584	3.41	-	39.92	461	698		
806	2.40	-	28.08	698	946		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	818	10.9	28.8	92.94		<div></div>

C3: LGM38564

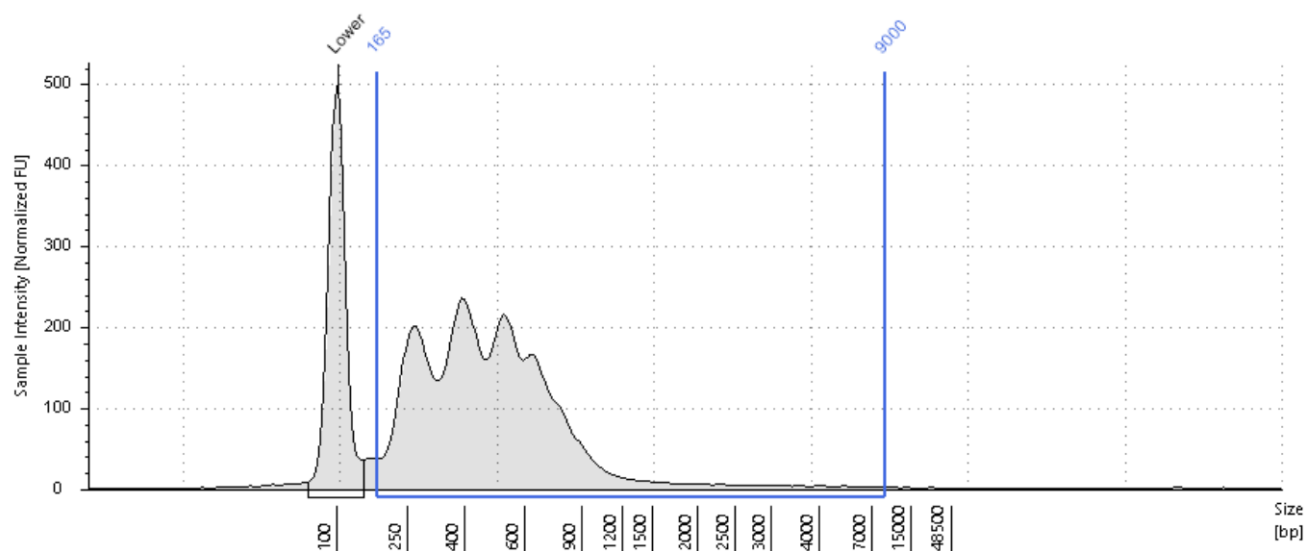


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
C3	1.0	28.7	LGM38564

Peak Table

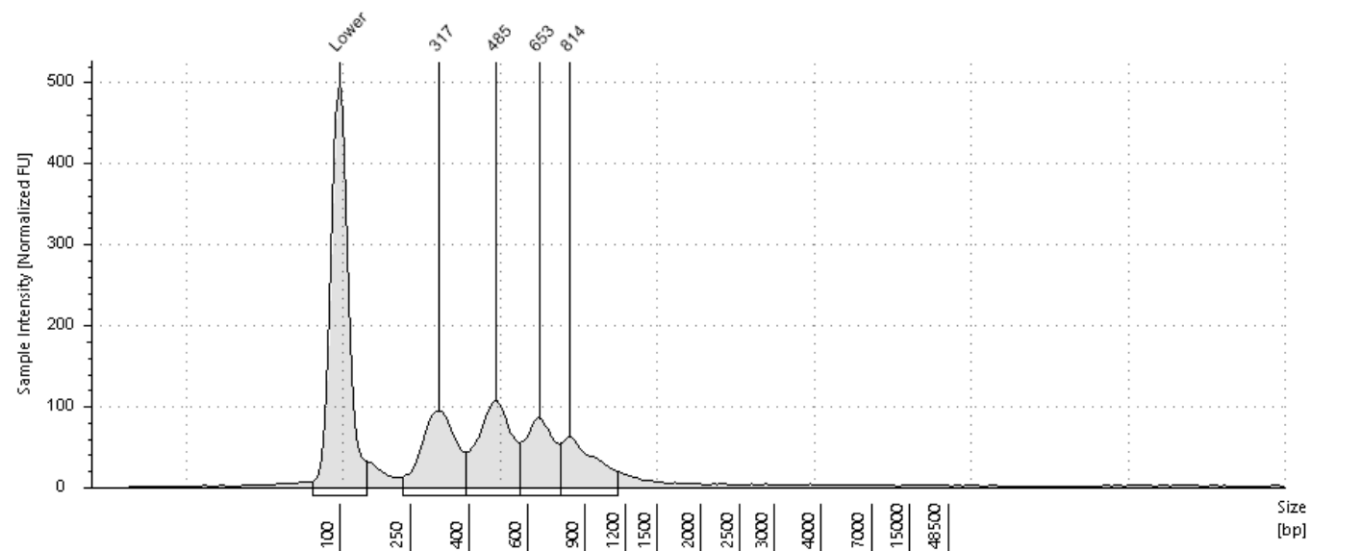
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	140		Lower Marker
264	6.71	-	32.57	171	321		
391	7.69	-	37.36	321	458		
524	6.19	-	30.07	458	594		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
165	9000	574	27.9	104	97.27		

D3: LGM38565

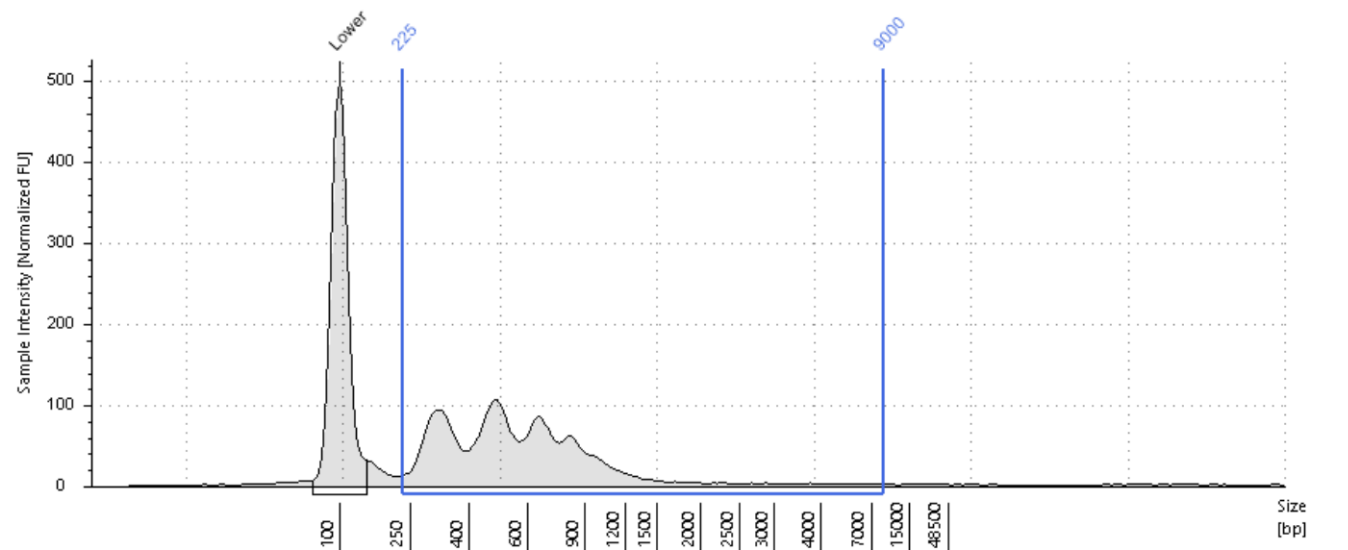


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
D3	1.1	12.6	LGM38565

Peak Table

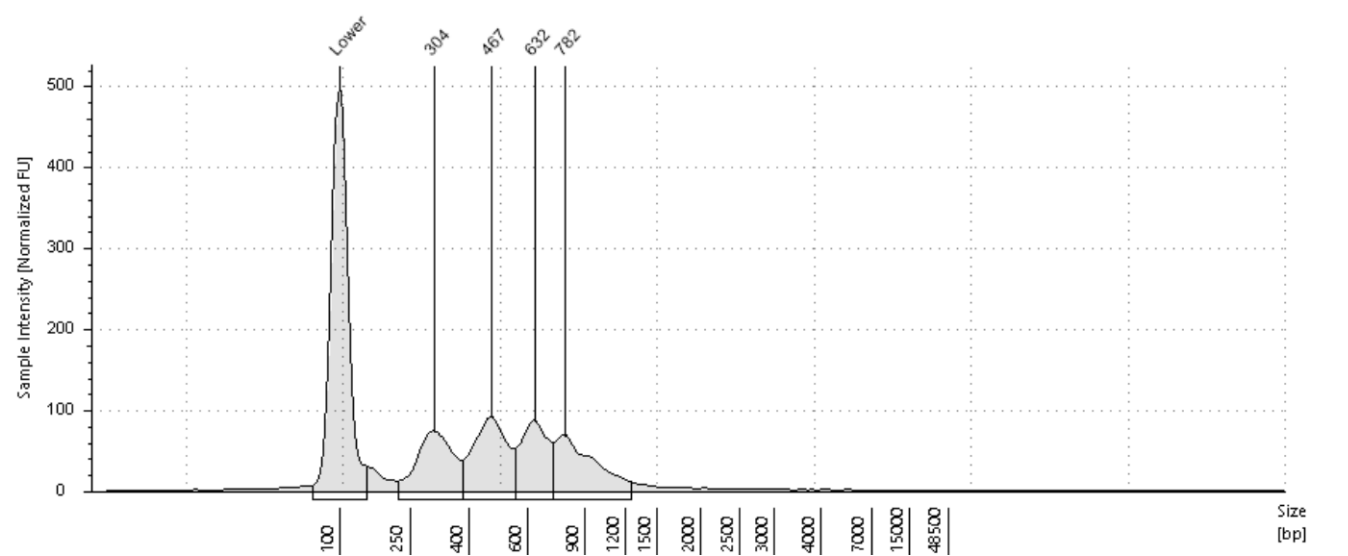
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	70	143		Lower Marker
317	3.17	-	28.45	229	394		
485	3.50	-	31.41	394	570		
653	2.41	-	21.59	570	756		
814	2.07	-	18.55	756	1141		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	725	11.7	37.4	93.06		

E3: LGM38566

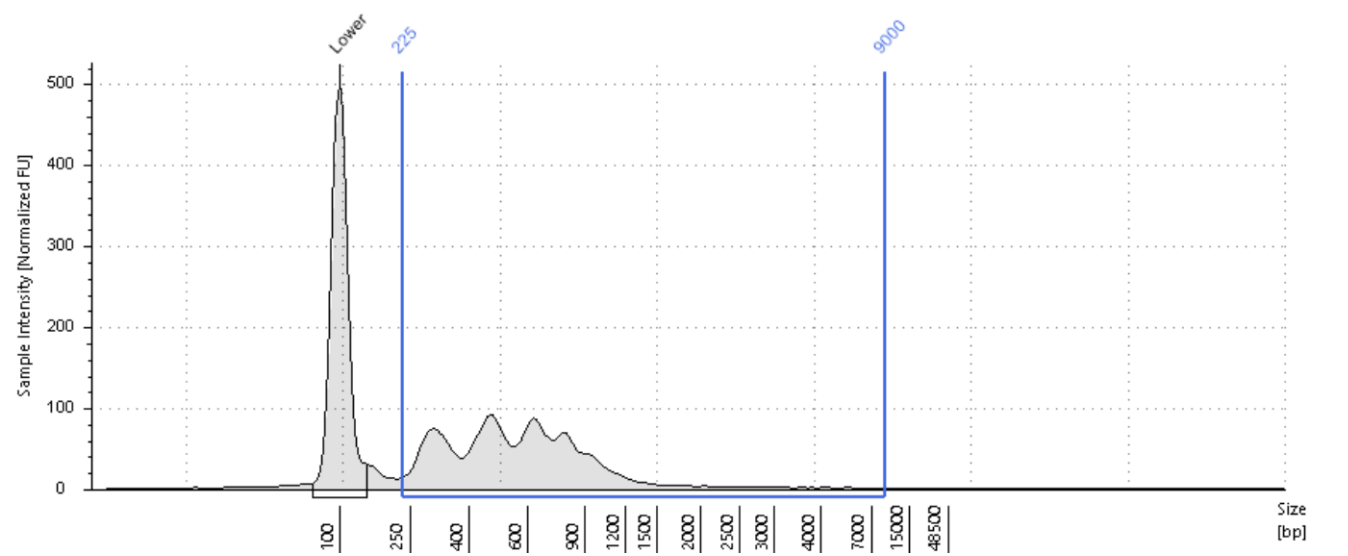


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
E3	1.1	11.9	LGM38566

Peak Table

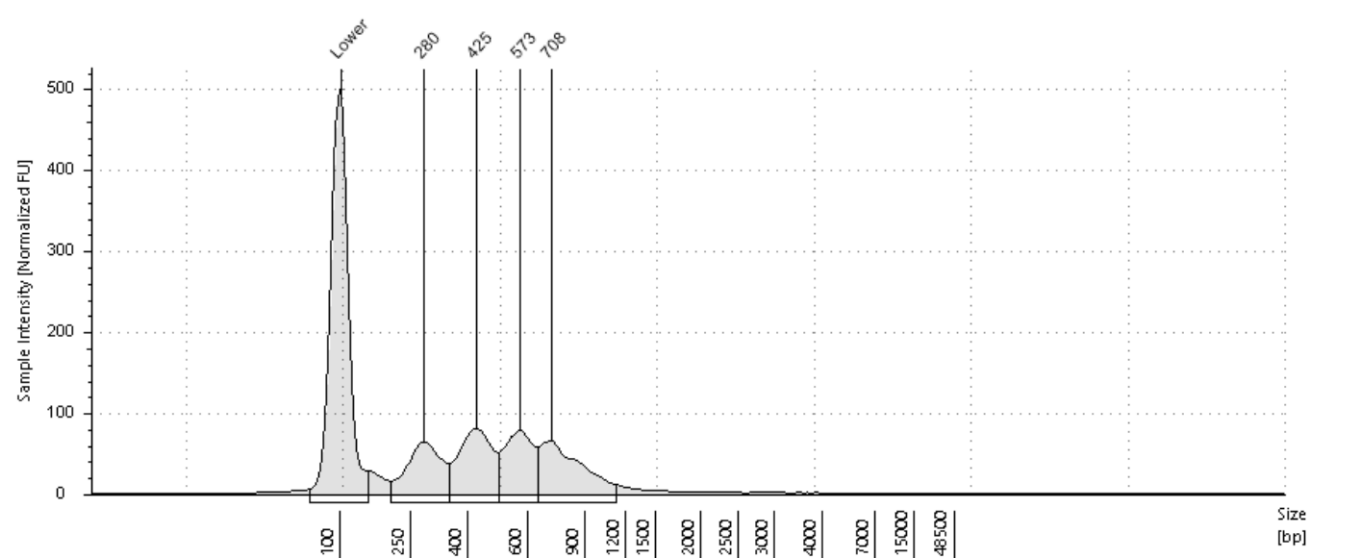
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	70	143		Lower Marker
304	2.64	-	24.25	213	380		
467	3.13	-	28.69	380	550		
632	2.43	-	22.29	550	719		
782	2.70	-	24.78	719	1246		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	696	11.1	35.0	93.57		

F3: LGM38567

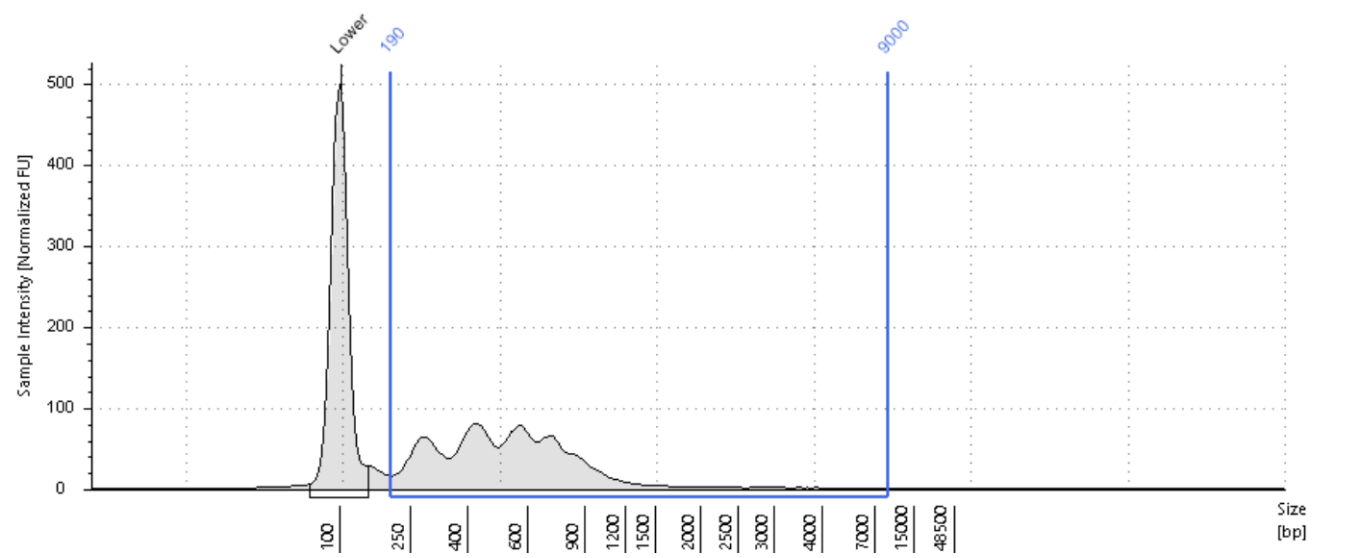


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
F3	1.0	11.1	LGM38567

Peak Table

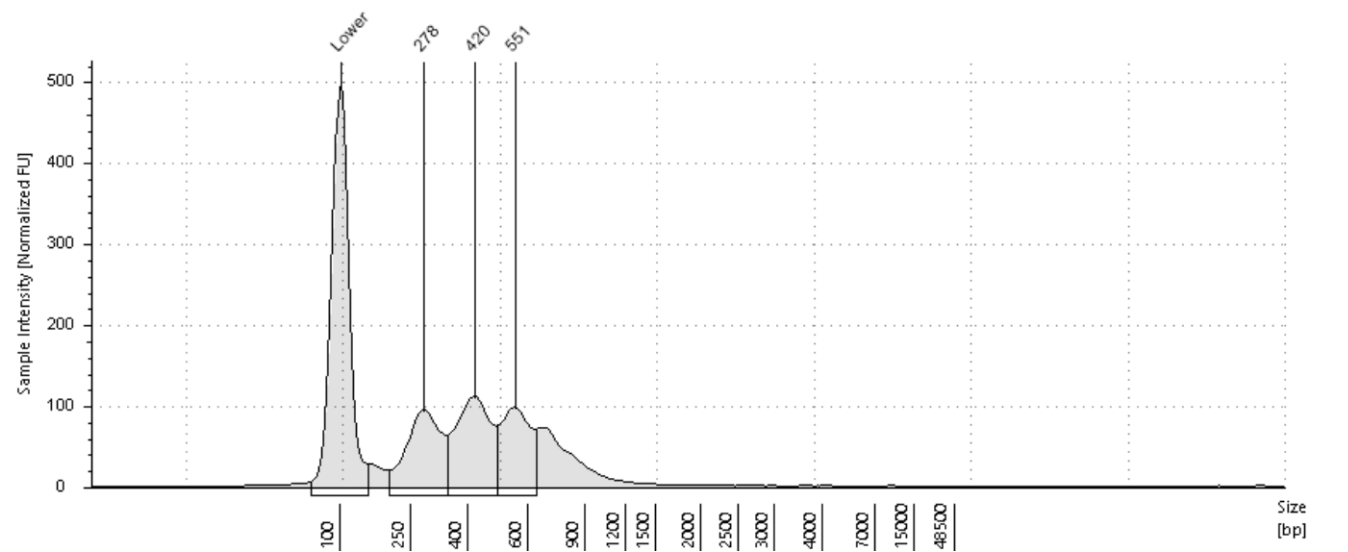
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	67	143		Lower Marker
280	2.15	-	22.07	195	343		
425	2.66	-	27.31	343	493		
573	2.29	-	23.50	493	649		
708	2.64	-	27.12	649	1129		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
190	9000	654	10.1	33.6	91.18		

G3: LGM38568

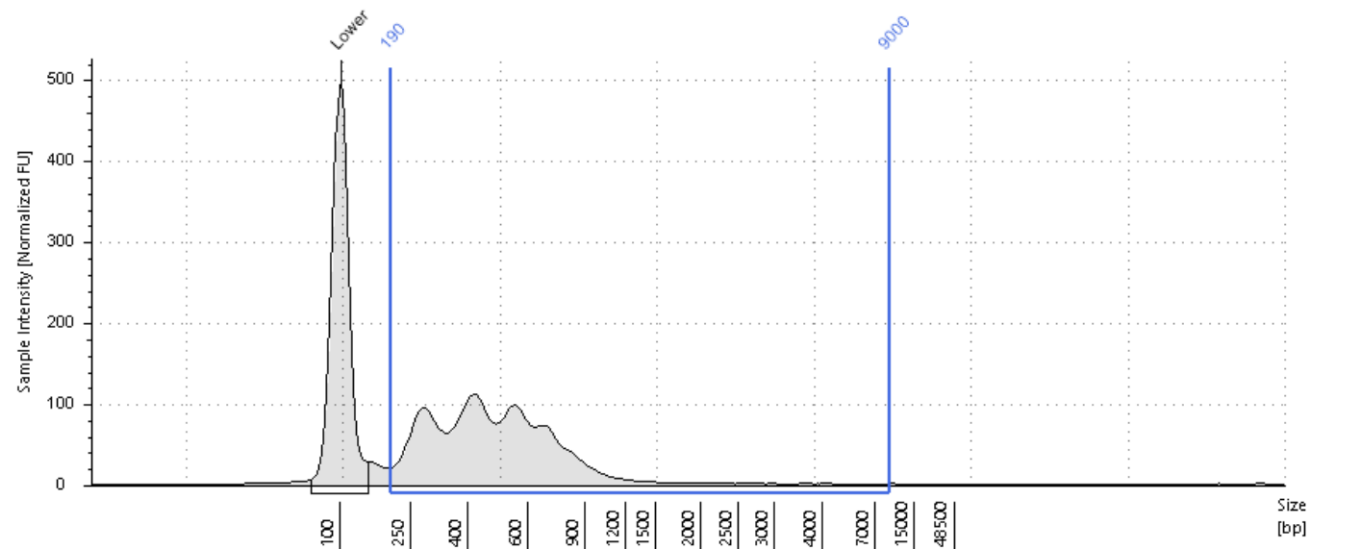


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
G3	1.0	13.4	LGM38568

Peak Table

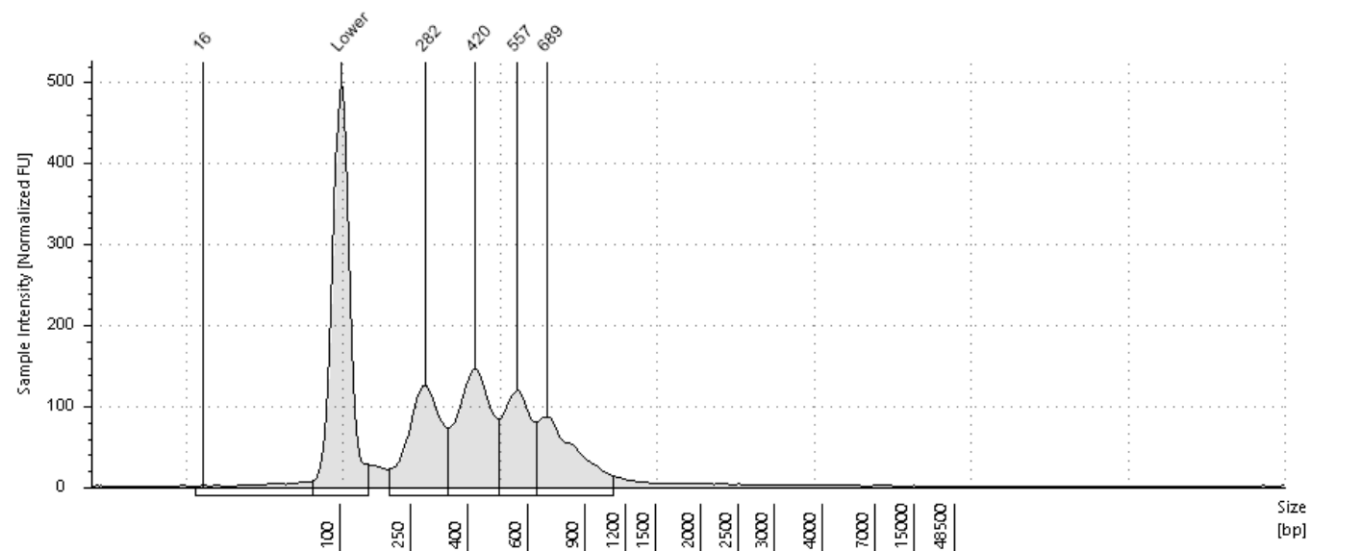
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	67	144		Lower Marker
278	3.13	-	32.01	189	338		
420	3.81	-	38.91	338	488		
551	2.85	-	29.08	488	636		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
190	9000	589	12.5	45.2	93.41		

H3: LGM38569

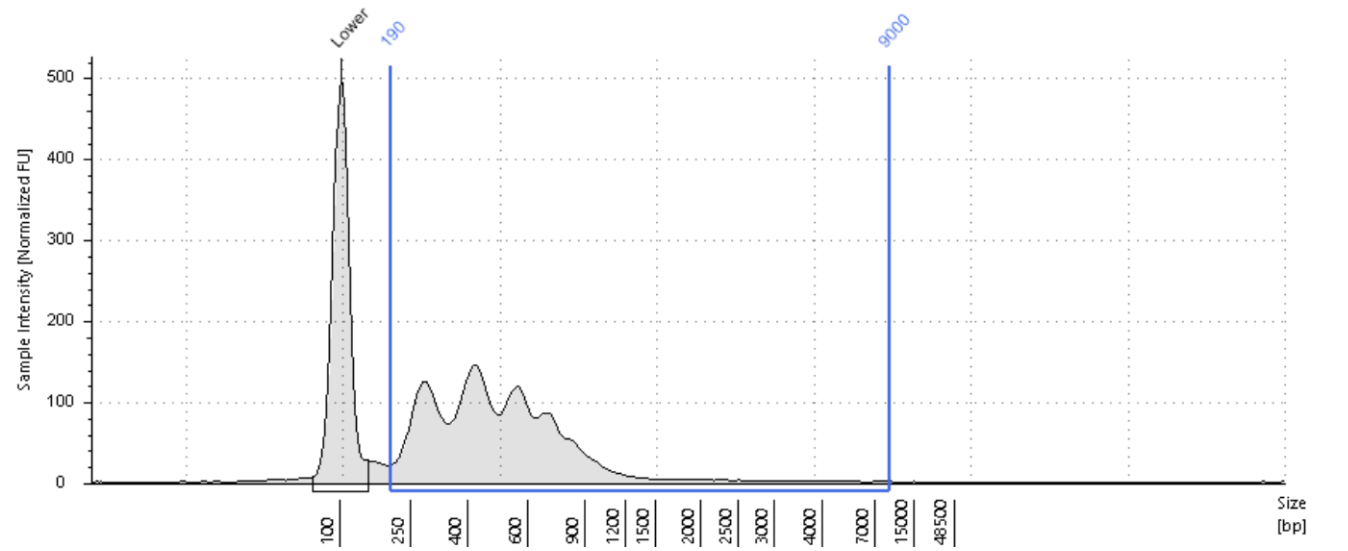


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
H3	1.0	16.7	LGM38569

Peak Table

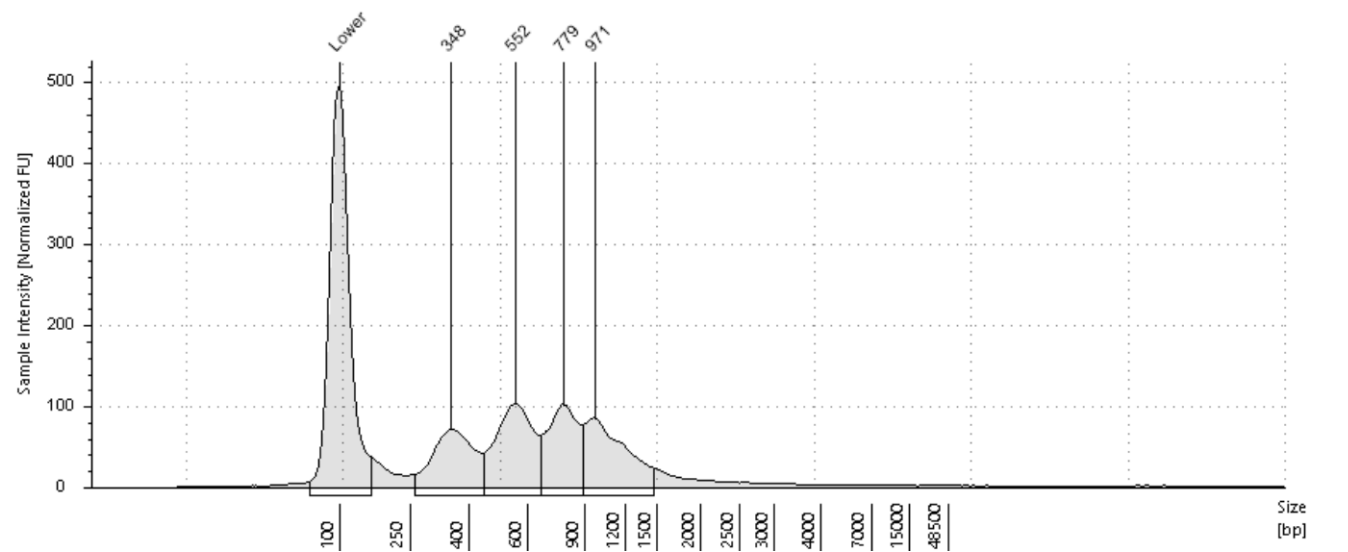
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
16	0.219	-	1.40	15	68		Peak outside of Sizing Range
100	8.50	8.50	-	68	144		Lower Marker
282	4.01	-	25.58	189	338		
420	4.86	-	31.03	338	493		
557	3.29	-	21.00	493	637		
689	3.29	-	21.00	637	1092		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
190	9000	608	15.8	56.7	94.70		

A4: LGM38570

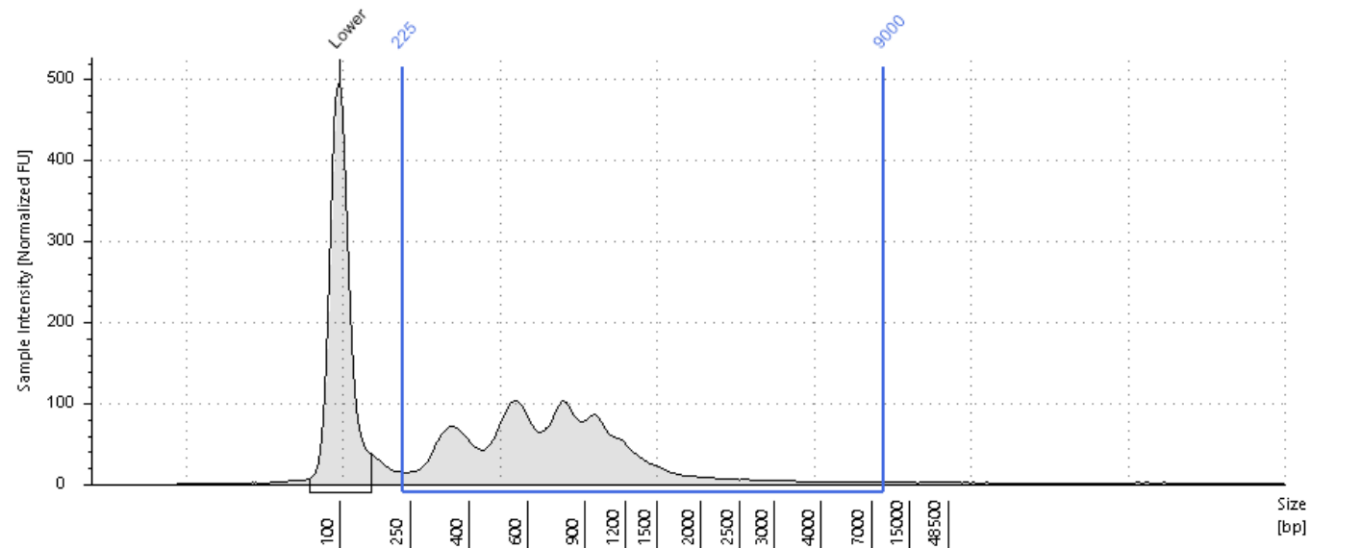


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
A4	1.5	13.4	LGM38570

Peak Table

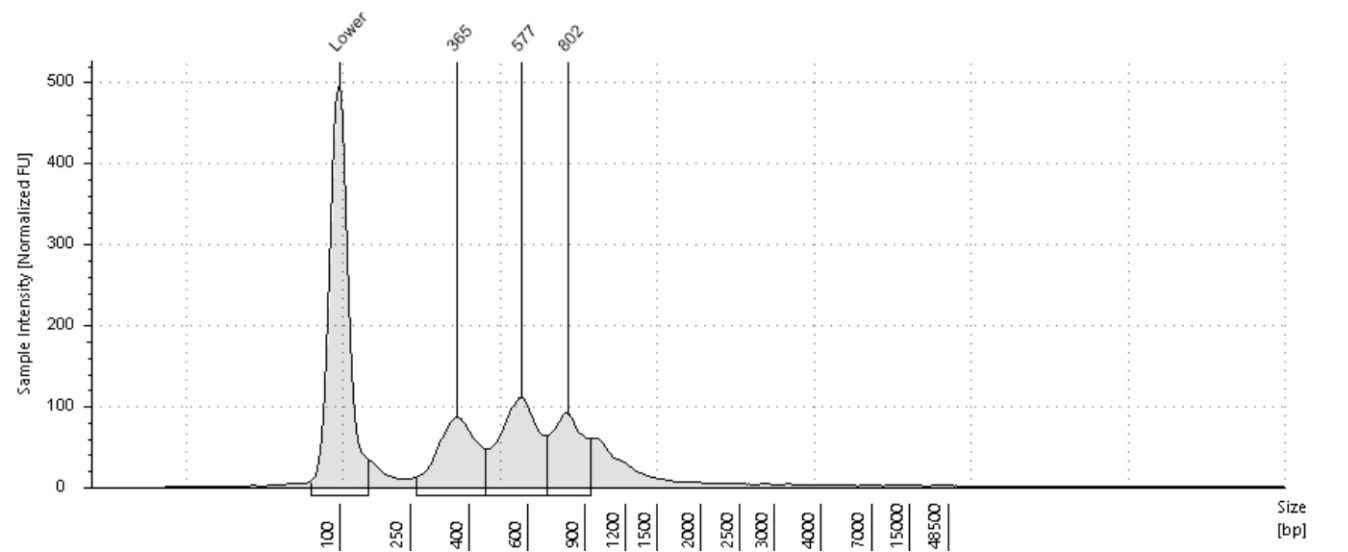
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	69	151		Lower Marker
348	2.53	-	21.60	260	445		
552	3.40	-	28.98	445	664		
779	2.74	-	23.37	664	889		
971	3.06	-	26.05	889	1482		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	866	12.6	32.4	94.05		

B4: LGM38571

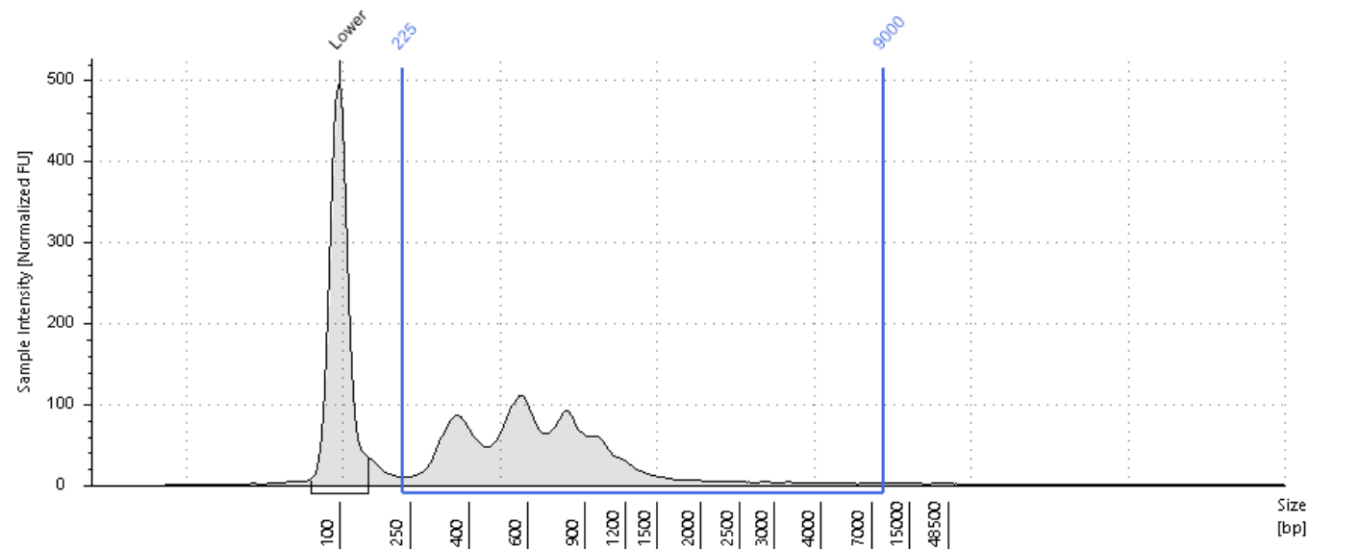


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
B4	1.3	12.6	LGM38571

Peak Table

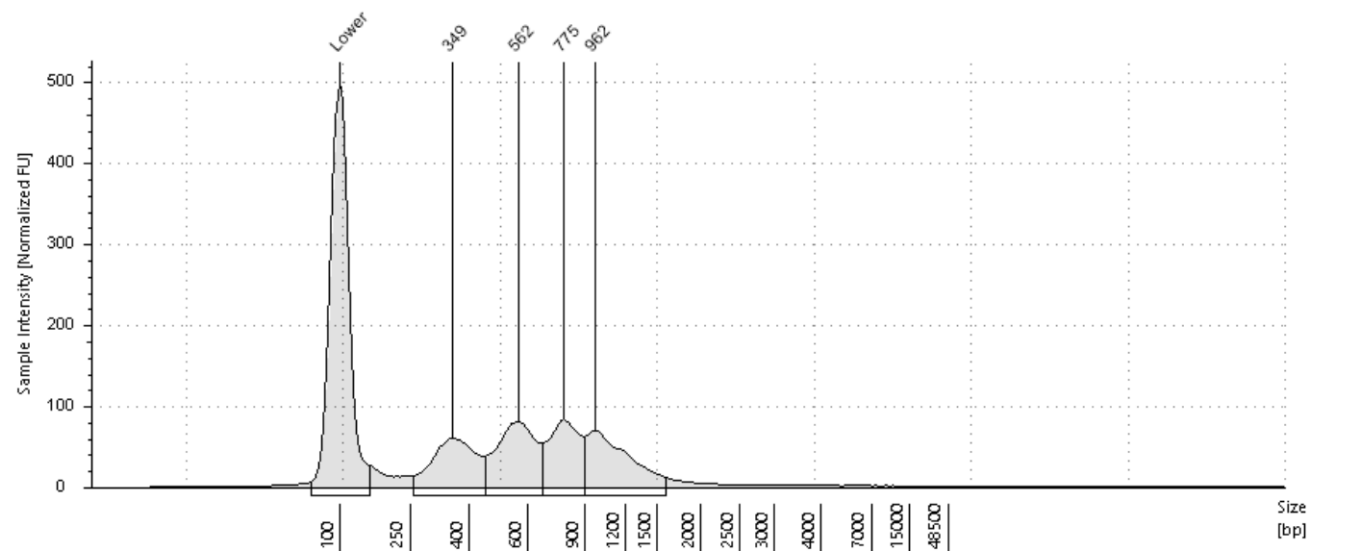
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	146		Lower Marker
365	3.05	-	31.76	264	452		
577	3.87	-	40.31	452	689		
802	2.68	-	27.94	689	941		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	794	11.9	32.5	94.31		

C4: LGM38572

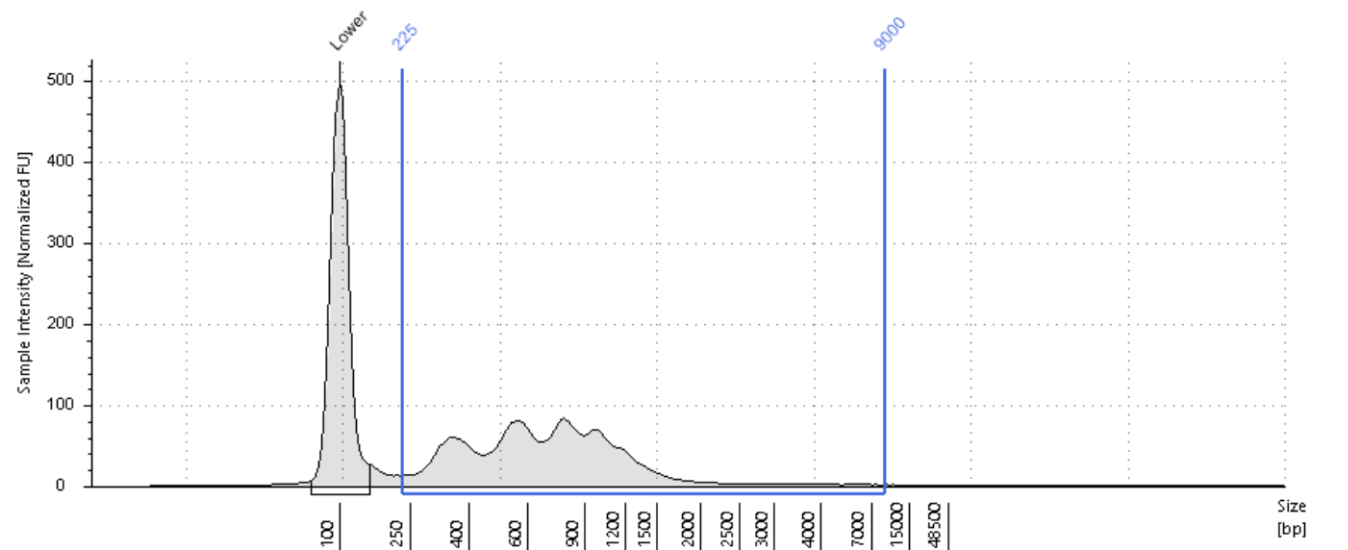


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
C4	1.5	11.2	LGM38572

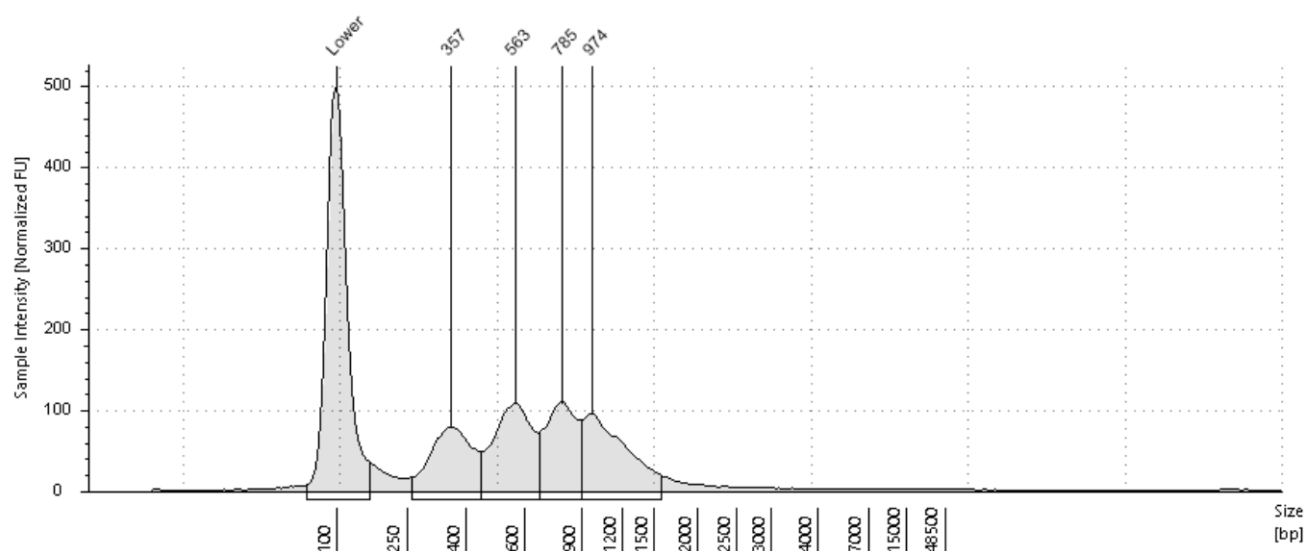
Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	147		Lower Marker
349	2.38	-	23.08	255	447		
562	2.86	-	27.73	447	666		
775	2.38	-	23.05	666	895		
962	2.70	-	26.15	895	1592		



Region Table

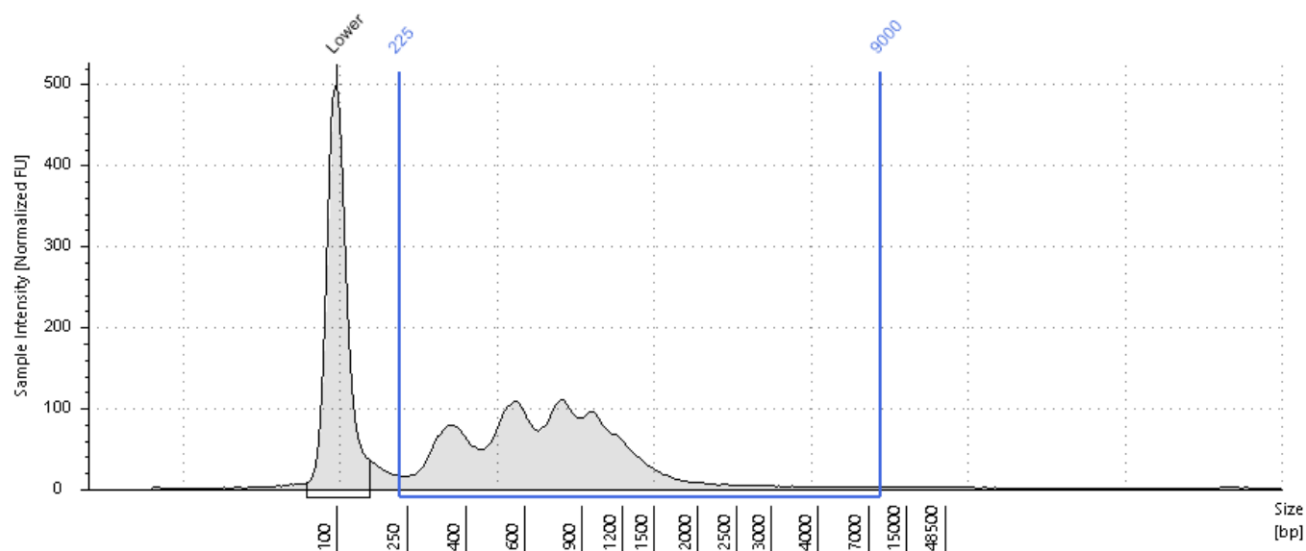
From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	825	10.7	28.2	95.23		

D4: LGM38573**Sample Table**

Well	DIN	Conc. [ng/μl]	Sample Description
D4	1.5	14.3	LGM38573

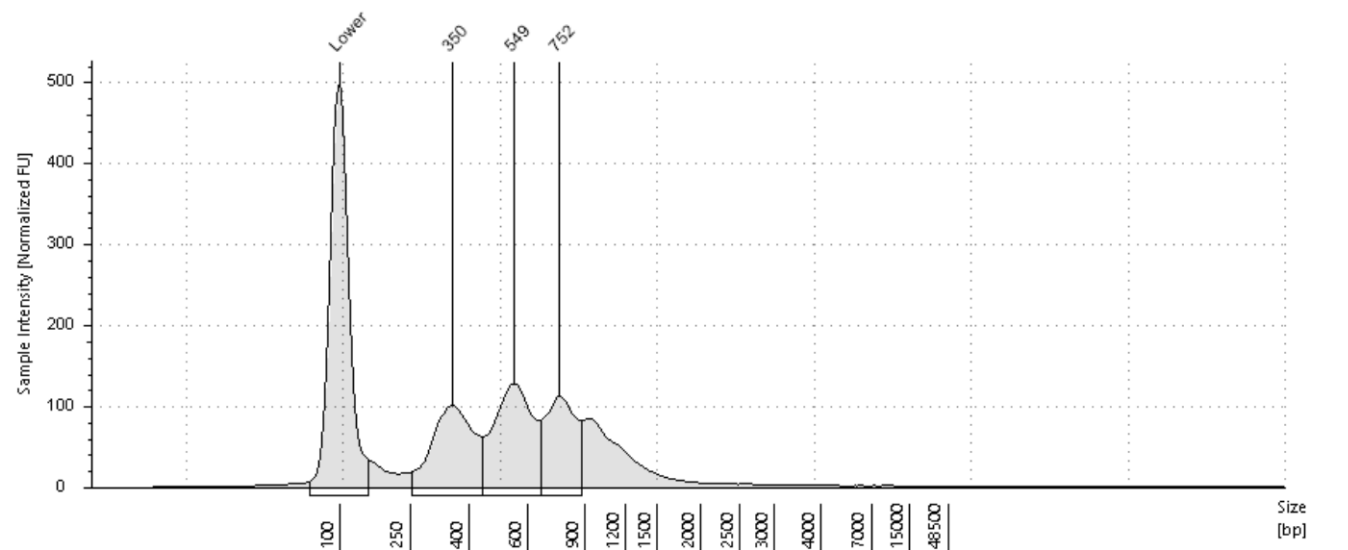
Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	154		Lower Marker
357	2.75	-	21.46	260	444		
563	3.57	-	27.81	444	668		
785	2.98	-	23.23	668	898		
974	3.53	-	27.51	898	1585		

**Region Table**

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	854	13.5	34.5	94.09		

E4: LGM38574

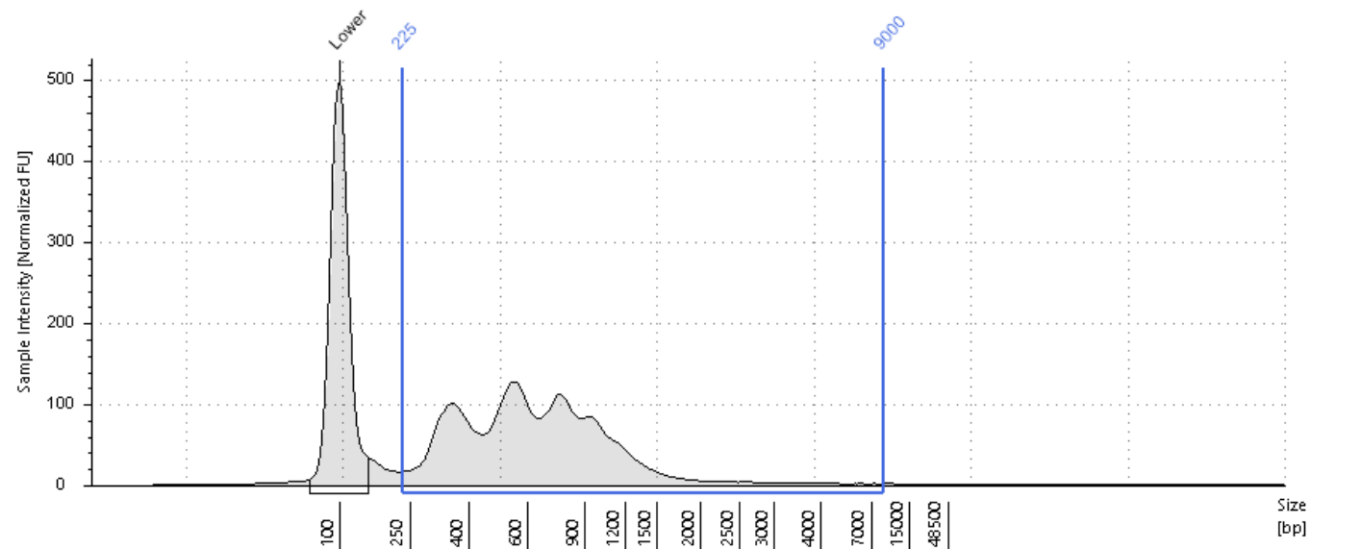


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
E4	1.3	15.8	LGM38574

Peak Table

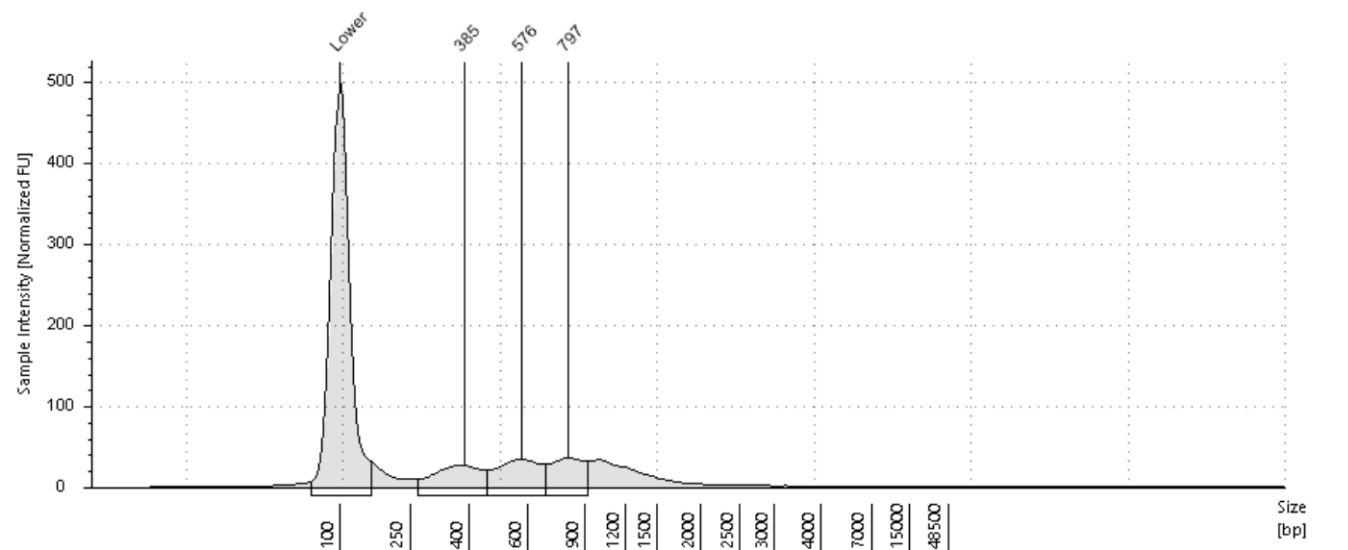
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	147		Lower Marker
350	3.78	-	33.04	253	441		
549	4.56	-	39.80	441	663		
752	3.11	-	27.17	663	876		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	753	15.0	41.7	95.12		

F4: LGM38575

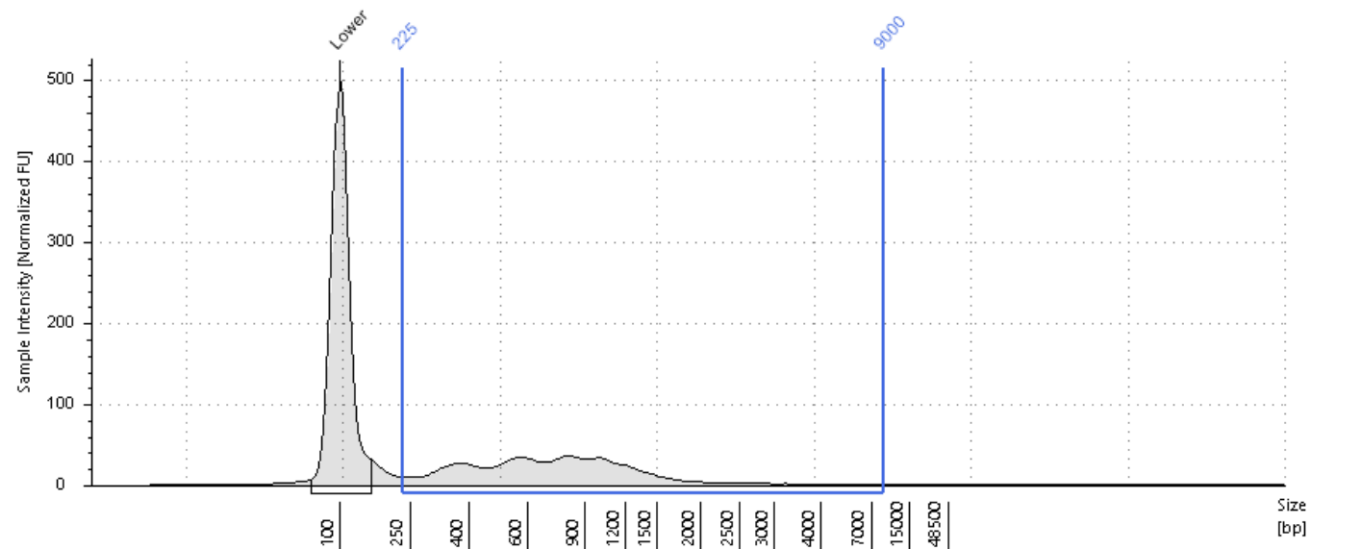


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
F4	1.5	6.08	LGM38575

Peak Table

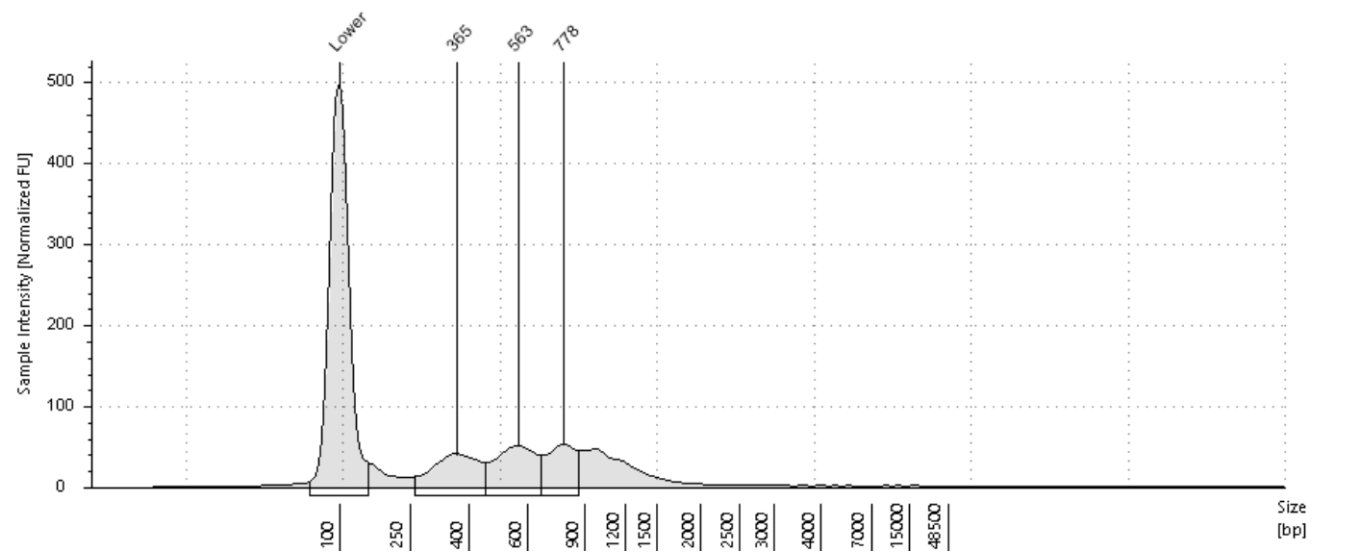
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	149		Lower Marker
385	1.13	-	31.62	266	454		
576	1.35	-	37.91	454	684		
797	1.09	-	30.47	684	913		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	895	5.39	13.7	88.56		

G4: LGM38576

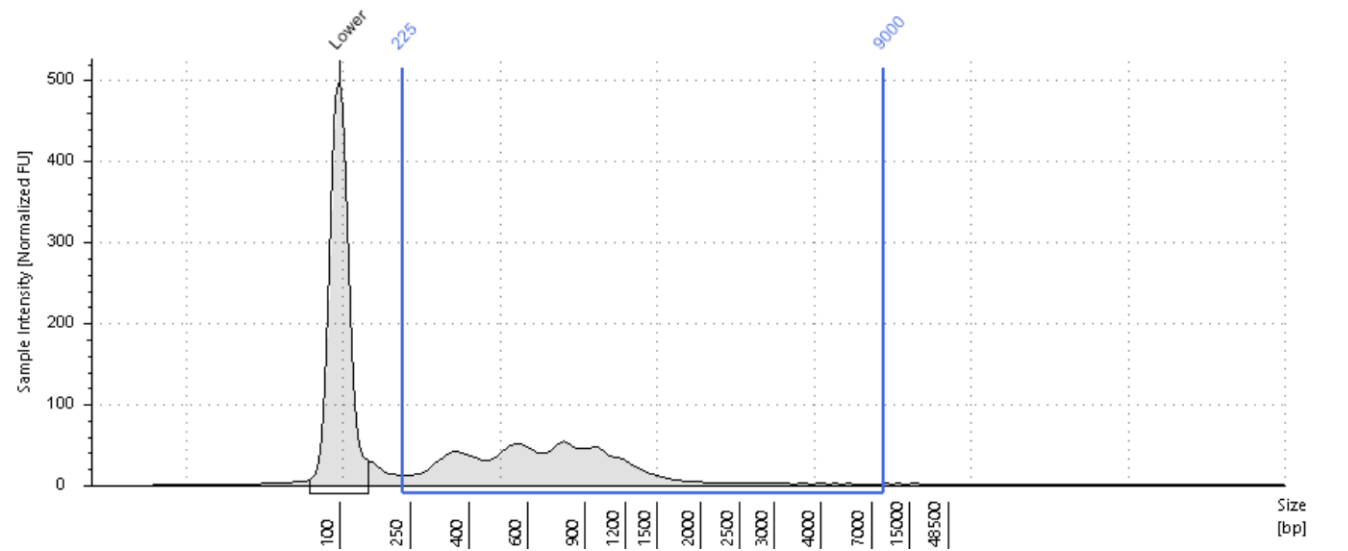


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
G4	1.4	7.87	LGM38576

Peak Table

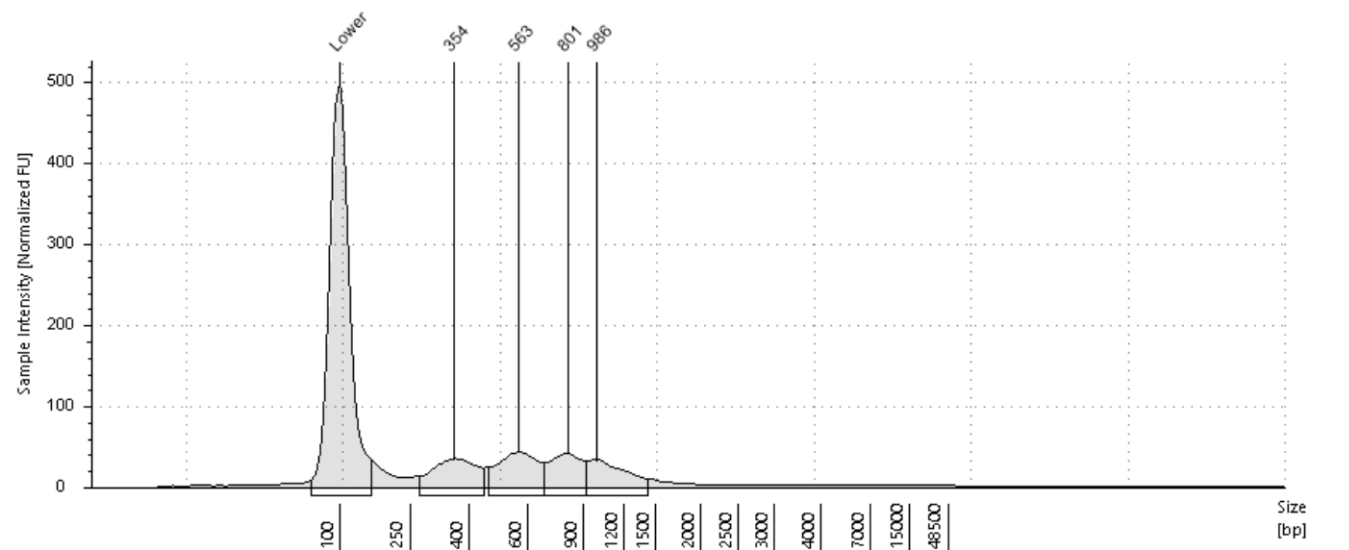
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	147		Lower Marker
365	1.66	-	34.11	260	452		
563	1.80	-	36.96	452	662		
778	1.41	-	28.92	662	867		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	851	7.19	19.1	91.40		

H4: LGM38577

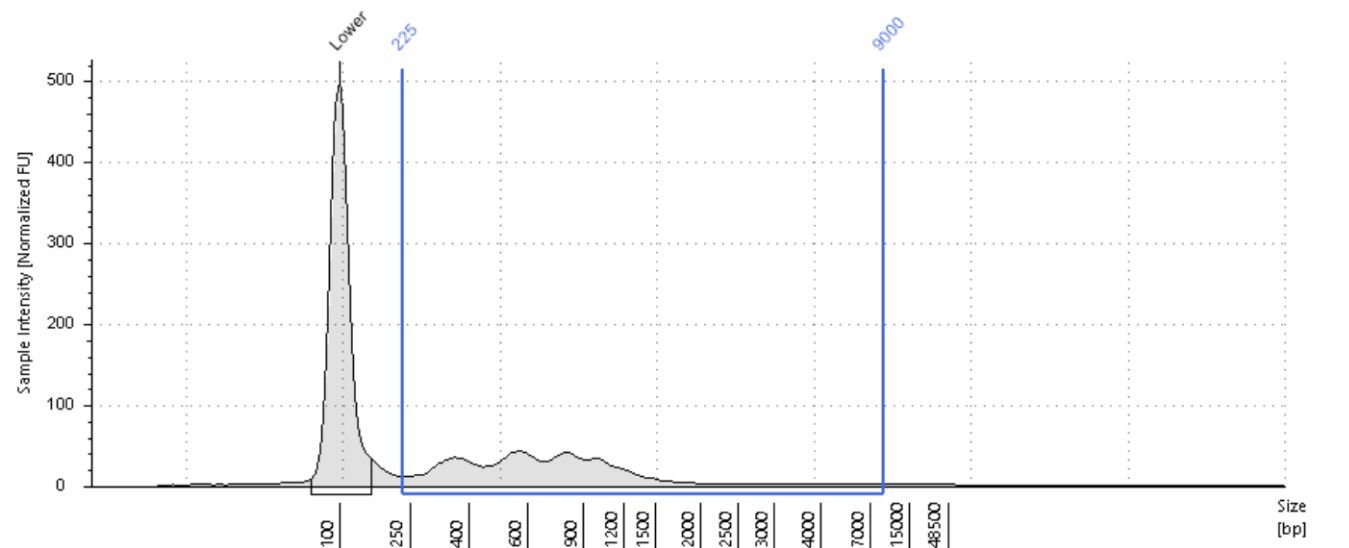


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
H4	1.4	6.48	LGM38577

Peak Table

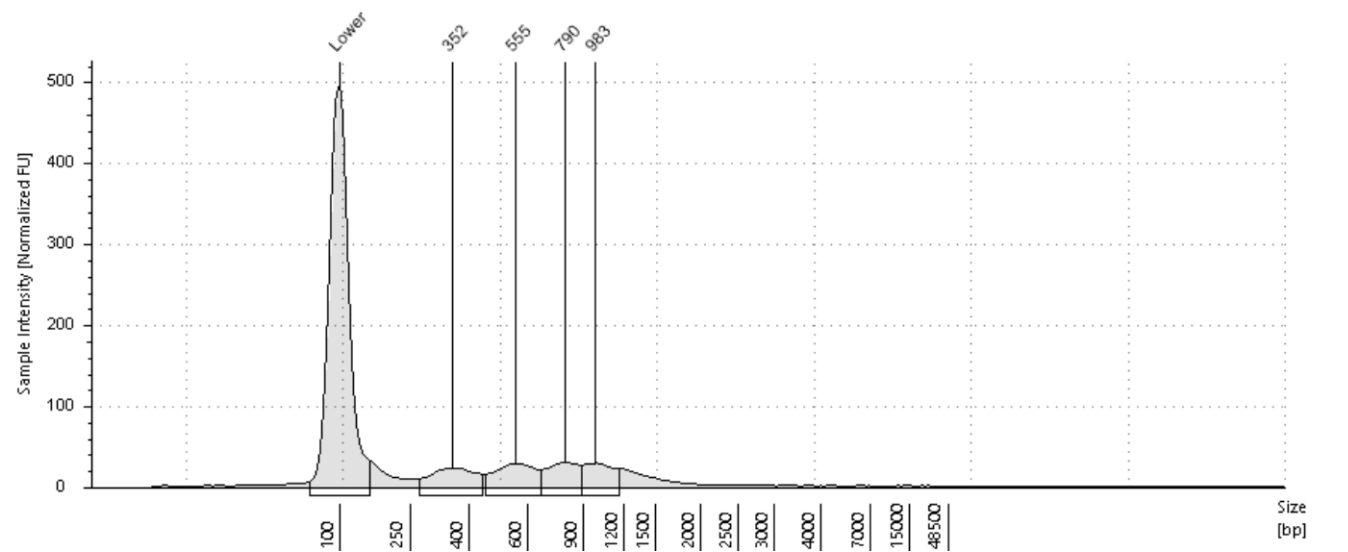
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	151		Lower Marker
354	1.30	-	25.97	270	444		
563	1.49	-	29.66	456	680		
801	1.15	-	22.94	680	918		
986	1.07	-	21.42	918	1416		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	906	5.66	15.2	87.40		

A5: LGM38578

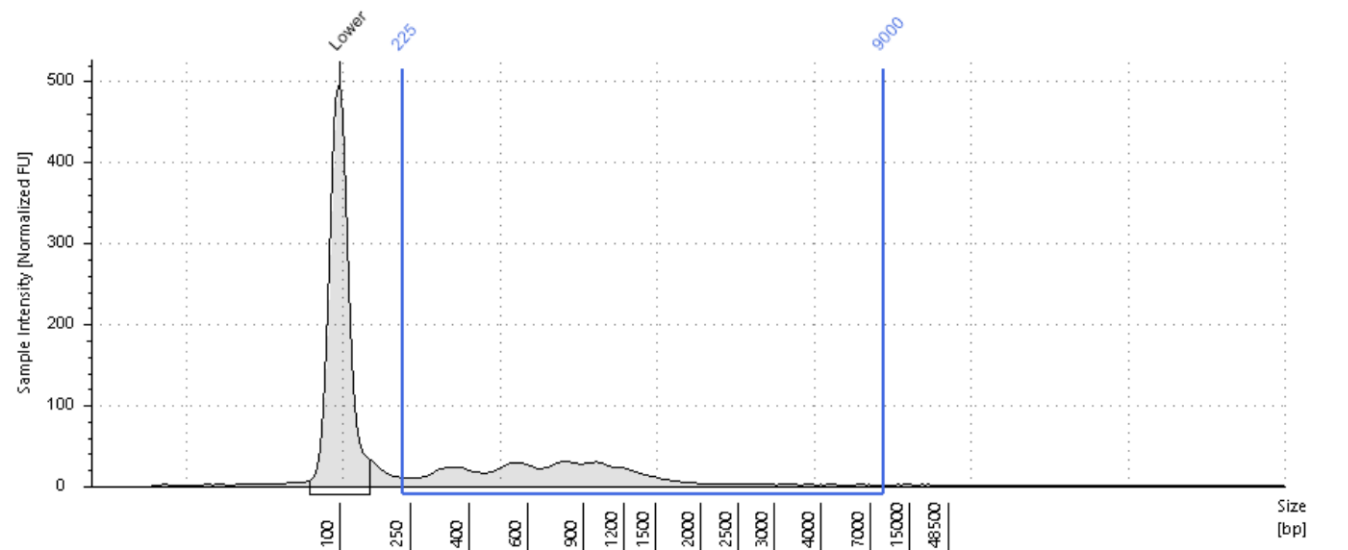


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
A5	1.5	5.30	LGM38578

Peak Table

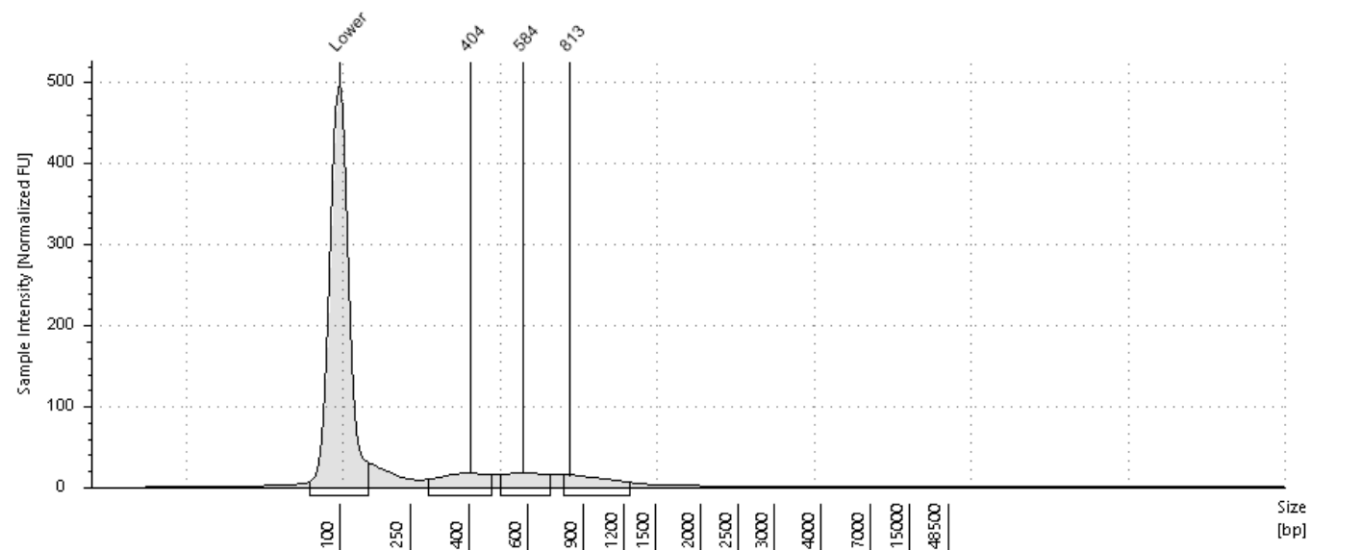
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	149		Lower Marker
352	0.908	-	25.33	270	442		
555	1.02	-	28.39	450	664		
790	0.858	-	23.94	664	890		
983	0.801	-	22.34	890	1164		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	948	4.53	11.8	85.39		

B5: LGM38579

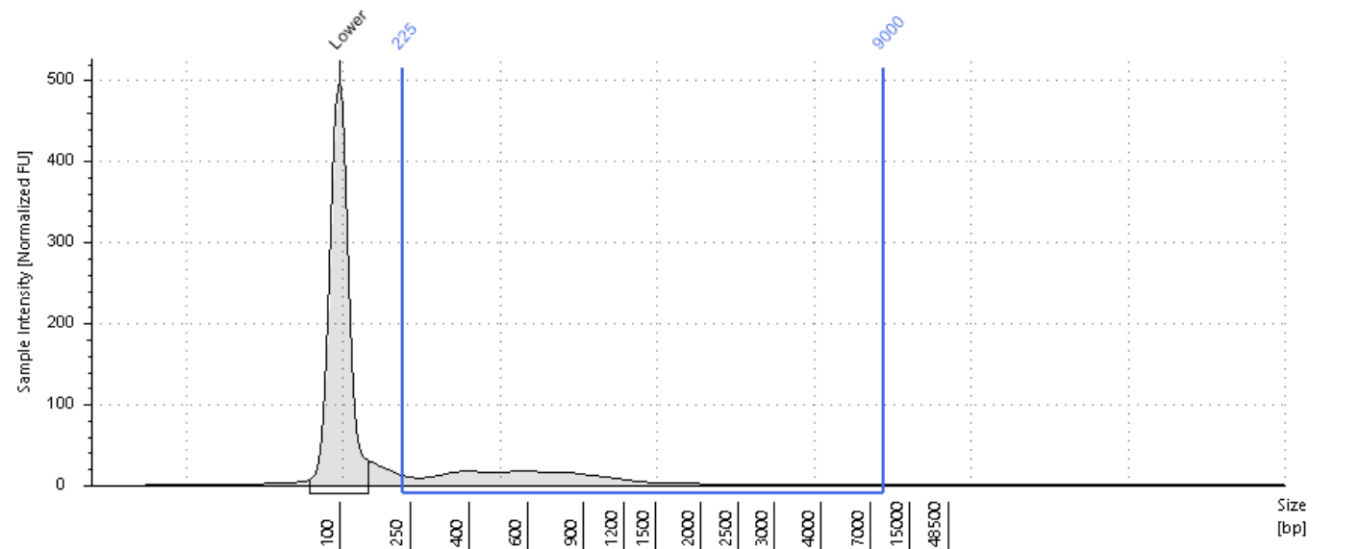


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
B5	1.2	3.29	LGM38579

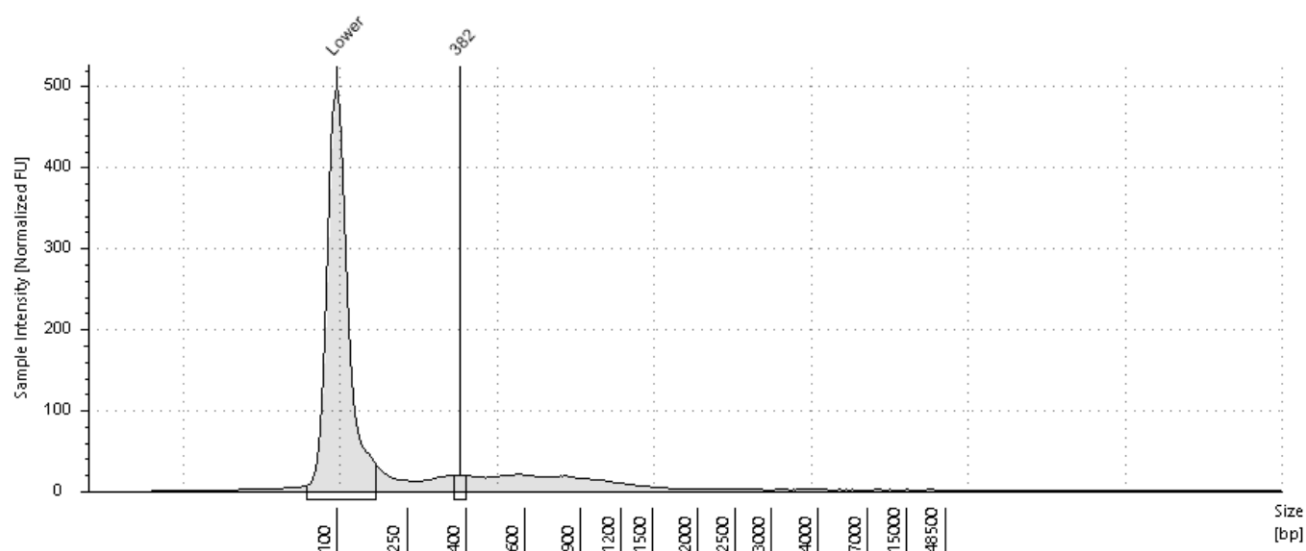
Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	147		Lower Marker
404	0.732	-	37.40	288	469		
584	0.646	-	33.03	499	708		
813	0.579	-	29.57	777	1245		



Region Table

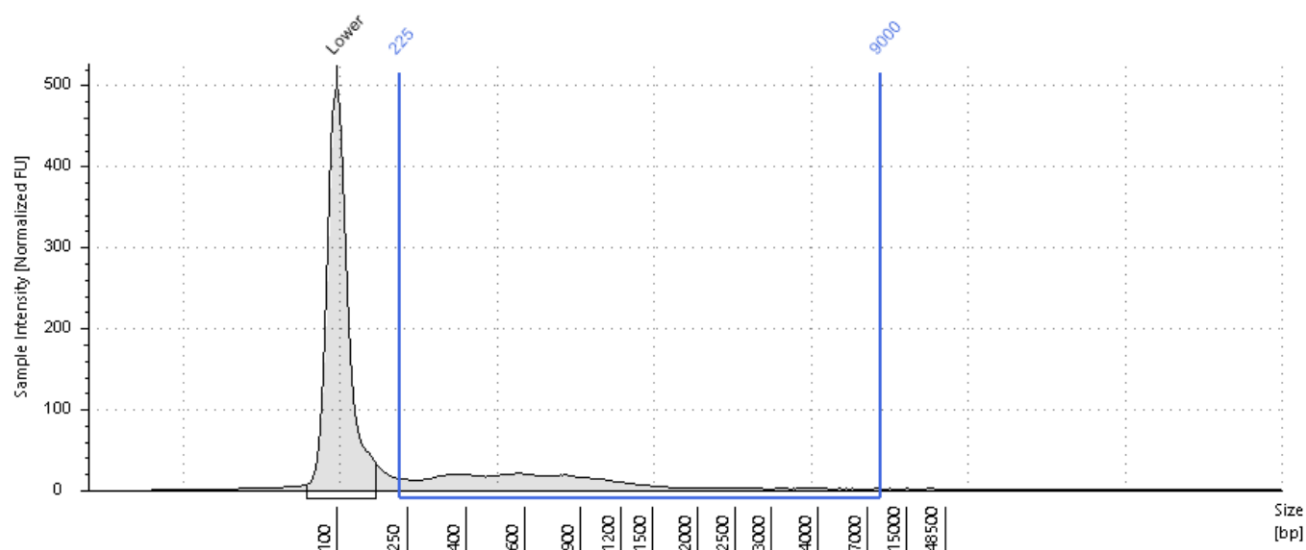
From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	843	2.59	7.90	78.63		<div></div>

C5: LGM38580**Sample Table**

Well	DIN	Conc. [ng/μl]	Sample Description
C5	1.2	3.62	LGM38580

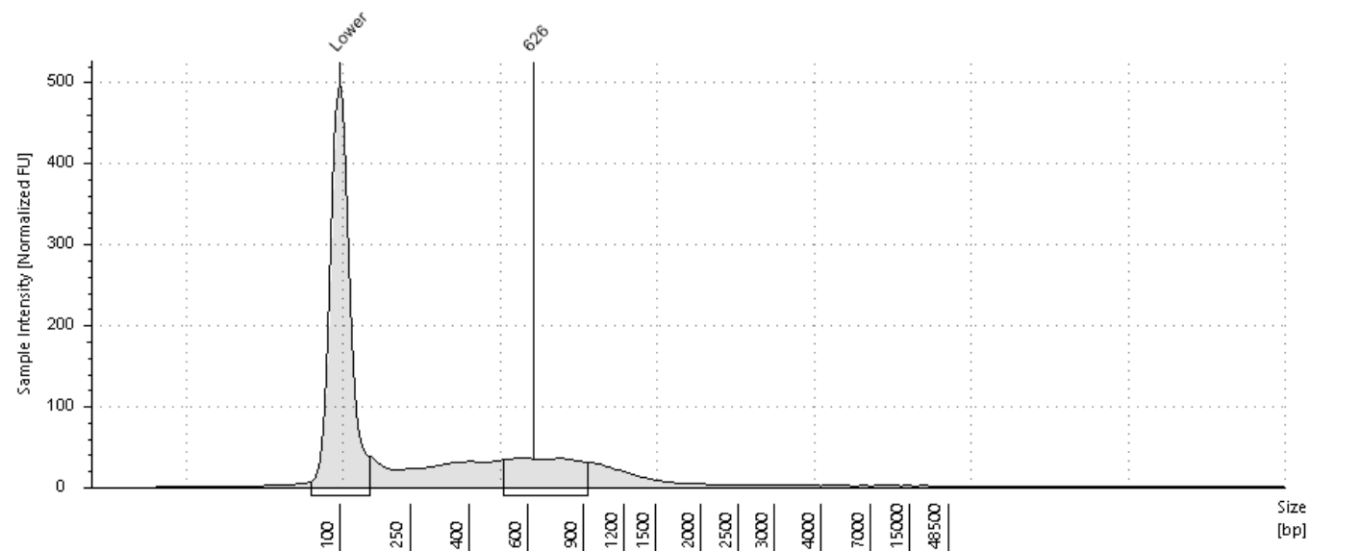
Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	167		Lower Marker
382	0.193	-	100.00	363	402		

**Region Table**

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	935	2.99	8.83	82.53		

D5: LGM38581

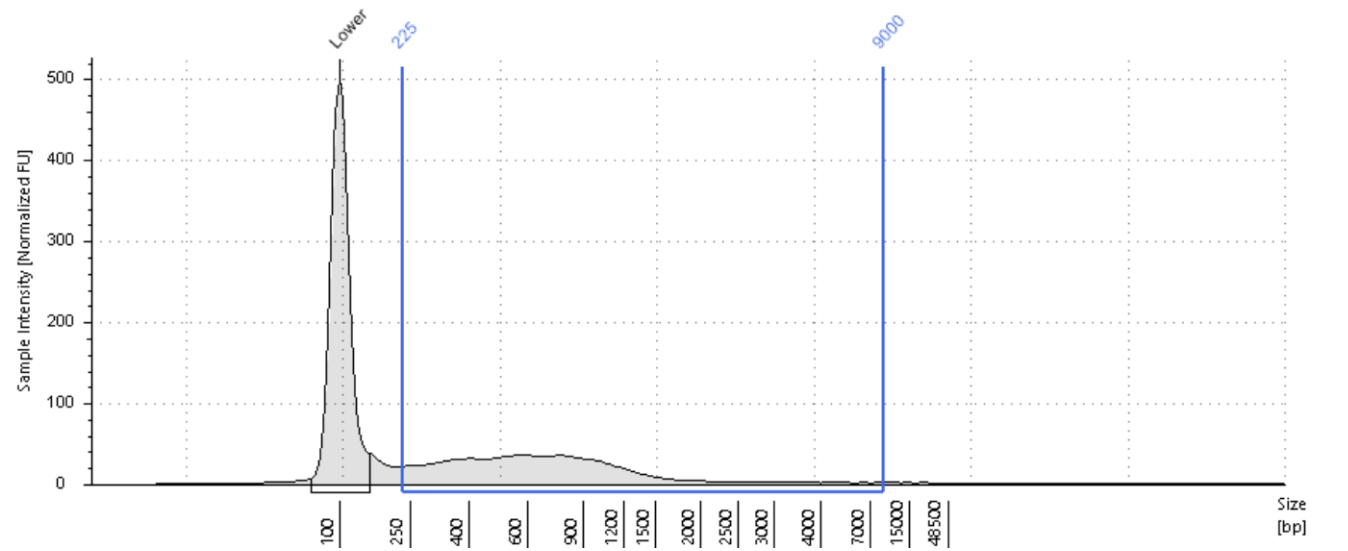


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
D5	1.3	6.80	LGM38581

Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	149		Lower Marker
626	2.24	-	100.00	507	926		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
225	9000	854	5.79	16.5	85.18		



Azenta NGS Laboratory Library QC Report

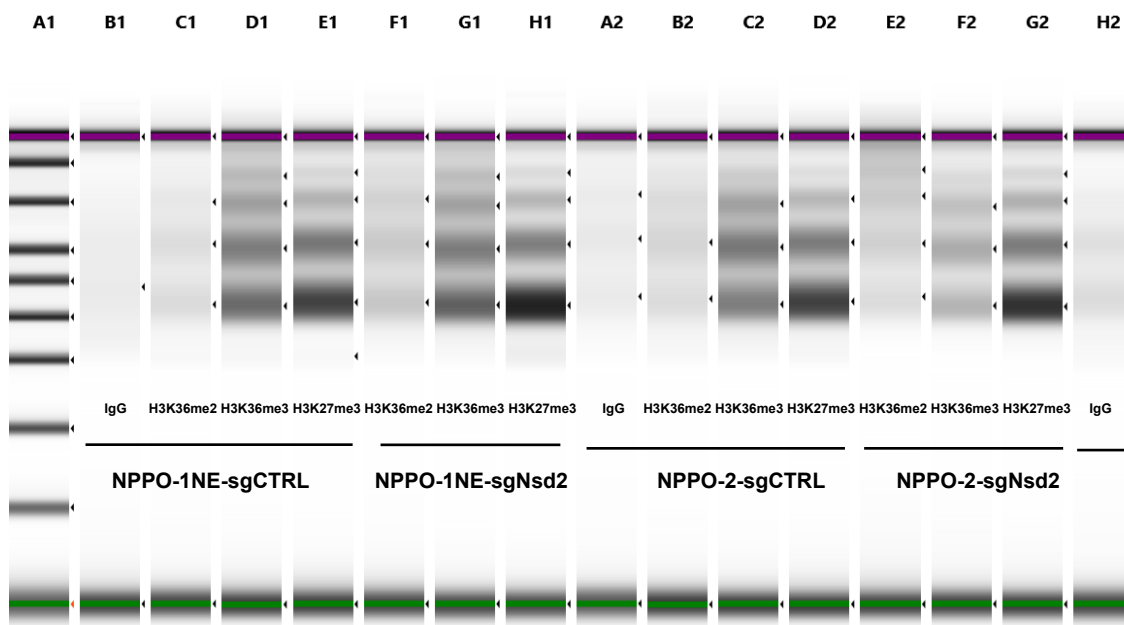
Name: Jia Li
Institution: Columbia University
Quotation Number: 30-1125610508

Sample #	Sample Name	AZENTA ID	Library QC					
			TapeStation Data				Qubit Data	
			Dilution factor	Average library size (bp)	Nucleic acid conc.(ng/μl)	Nucleic acid conc.(nM)	Nucleic acid conc.(ng/μl)	Nucleic acid conc.(nM)
1	1	LGM38547	1.00	658.00	13.50	43.90	13.30	30.63
2	2	LGM38548	1.00	678.00	17.90	57.50	17.90	40.00
3	3	LGM38549	1.00	655.00	20.20	66.90	20.80	48.11
4	4	LGM38550	1.00	645.00	21.30	71.10	18.70	43.93
5	5	LGM38551	1.00	833.00	6.70	19.20	6.12	11.13
6	6	LGM38552	1.00	757.00	10.00	31.70	8.95	17.91
7	7	LGM38553	1.00	698.00	10.50	34.30	9.26	20.10
8	8	LGM38554	1.00	774.00	7.95	24.50	7.02	13.74
9	9	LGM38555	1.00	757.00	15.90	45.50	14.60	29.22
10	10	LGM38556	1.00	810.00	24.10	69.40	18.70	34.98
11	11	LGM38557	1.00	716.00	22.50	70.20	22.60	47.82
12	12	LGM38558	1.00	760.00	22.40	68.20	21.80	43.46
13	13	LGM38559	1.00	774.00	19.00	54.10	18.70	36.61
14	14	LGM38560	1.00	821.00	18.10	50.10	16.20	29.90
15	15	LGM38561	1.00	760.00	18.80	56.70	18.40	36.68
16	16	LGM38562	1.00	810.00	16.50	45.40	14.70	27.50
17	17	LGM38563	1.00	818.00	10.90	28.80	10.40	19.26
18	18	LGM38564	1.00	574.00	27.90	104.00	0.92	2.43
19	19	LGM38565	1.00	725.00	11.70	37.40	15.50	32.39
20	20	LGM38566	1.00	696.00	11.10	35.00	13.10	28.52
21	21	LGM38567	1.00	654.00	10.10	33.60	1.19	2.76
22	22	LGM38568	1.00	589.00	12.50	45.20	1.01	2.60
23	23	LGM38569	1.00	608.00	15.80	56.70	1.07	2.67
24	24	LGM38570	1.00	866.00	12.60	32.40	9.83	17.20
25	25	LGM38571	1.00	794.00	11.90	32.50	10.10	19.27
26	26	LGM38572	1.00	825.00	10.70	28.20	10.40	19.10
27	27	LGM38573	1.00	854.00	13.50	34.50	13.20	23.42
28	28	LGM38574	1.00	753.00	15.00	41.70	15.00	30.18
29	29	LGM38575	1.00	895.00	5.39	13.70	4.61	7.80

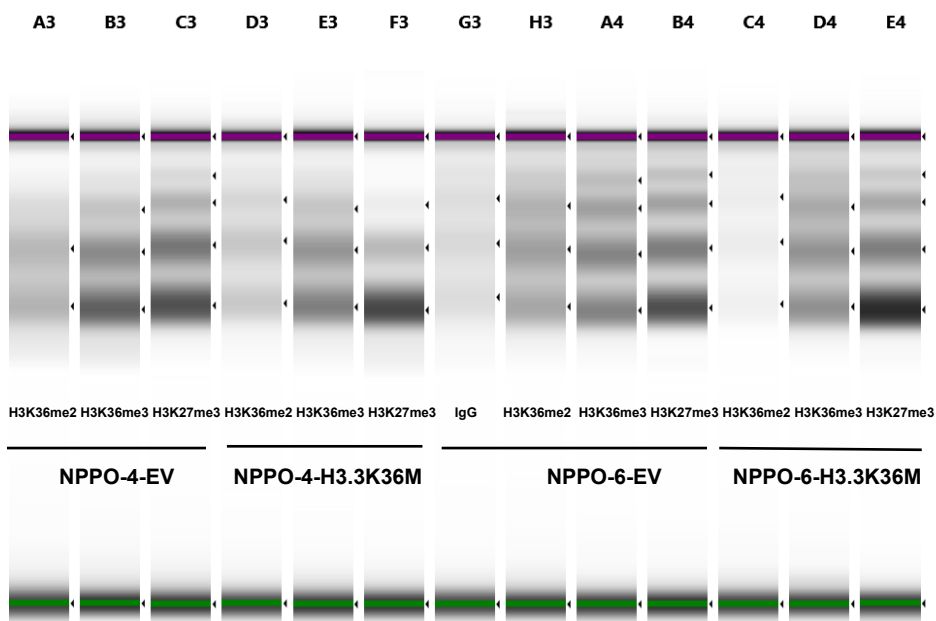
30	30	LGM38576	1.00	851.00	7.19	19.10	7.68	13.67
31	31	LGM38577	1.00	906.00	5.66	15.20	5.07	8.48
32	32	LGM38578	1.00	948.00	4.53	11.80	3.80	6.07
33	33	LGM38579	1.00	843.00	2.59	7.90	2.05	3.68
34	34	LGM38580	1.00	935.00	2.99	8.83	2.63	4.26
35	35	LGM38581	1.00	854.00	5.79	16.50	5.87	10.41

Related to Extended Data Figure 5f,g,h,i (Batch1)

Filename: LibraryQC-1-28- 30-528672863.cD1000



Default image (Contrast 100%)



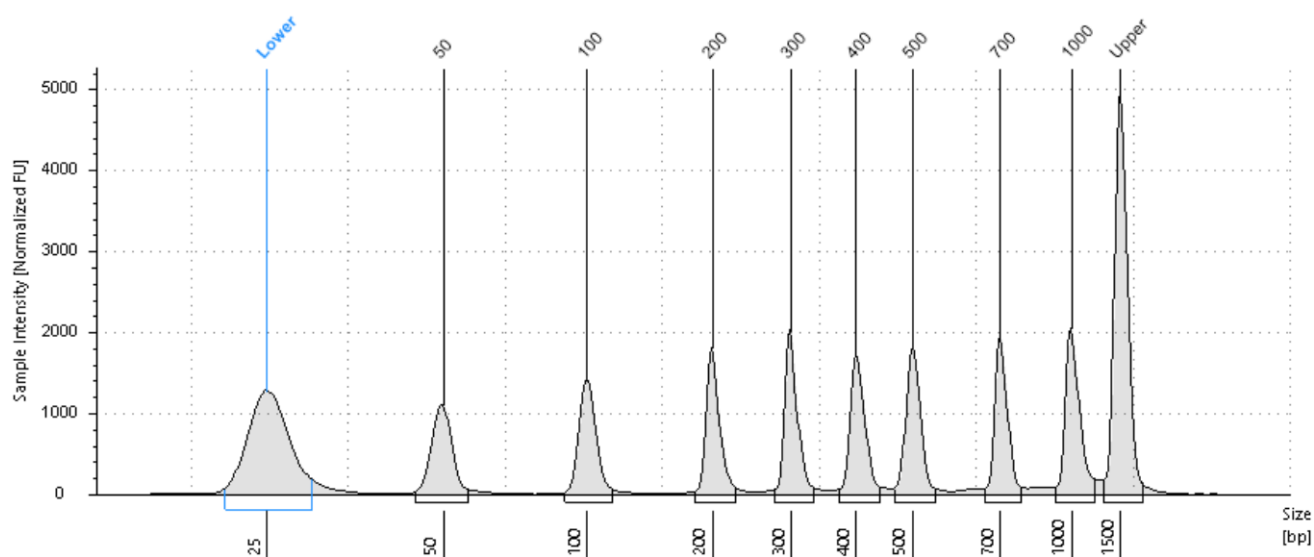
Default image (Contrast 100%)

Sample Info

Well	Conc. [ng/μl]	Sample Description	Alert	Observations
A1	20.3	Electronic Ladder		Ladder
B1	0.441	LDE13392 - 1		
C1	3.01	LDE13393 - 2		
D1	16.8	LDE13394 - 3		

E1	17.8	LDE13395 - 4		
F1	6.70	LDE13396 - 5		
G1	18.8	LDE13397 - 6		
H1	21.2	LDE13398 - 7		
A2	2.70	LDE13399 - 8		
B2	2.84	LDE13400 - 9		
C2	15.3	LDE13401 - 10		
D2	17.4	LDE13402 - 11		
E2	5.88	LDE13403 - 12		
F2	8.59	LDE13404 - 13		
G2	18.5	LDE13405 - 14		
H2	2.73	LDE13406 - 15		
A3	8.06	LDE13407 - 16		
B3	14.4	LDE13408 - 17		
C3	16.7	LDE13409 - 18		
D3	6.47	LDE13410 - 19		
E3	12.7	LDE13411 - 20		
F3	12.0	LDE13412 - 21		
G3	4.63	LDE13413 - 22		
H3	12.8	LDE13414 - 23		
A4	16.2	LDE13415 - 24		
B4	17.8	LDE13416 - 25		
C4	1.70	LDE13417 - 26		
D4	13.3	LDE13418 - 27		
E4	21.2	LDE13419 - 28		

A1: Electronic Ladder

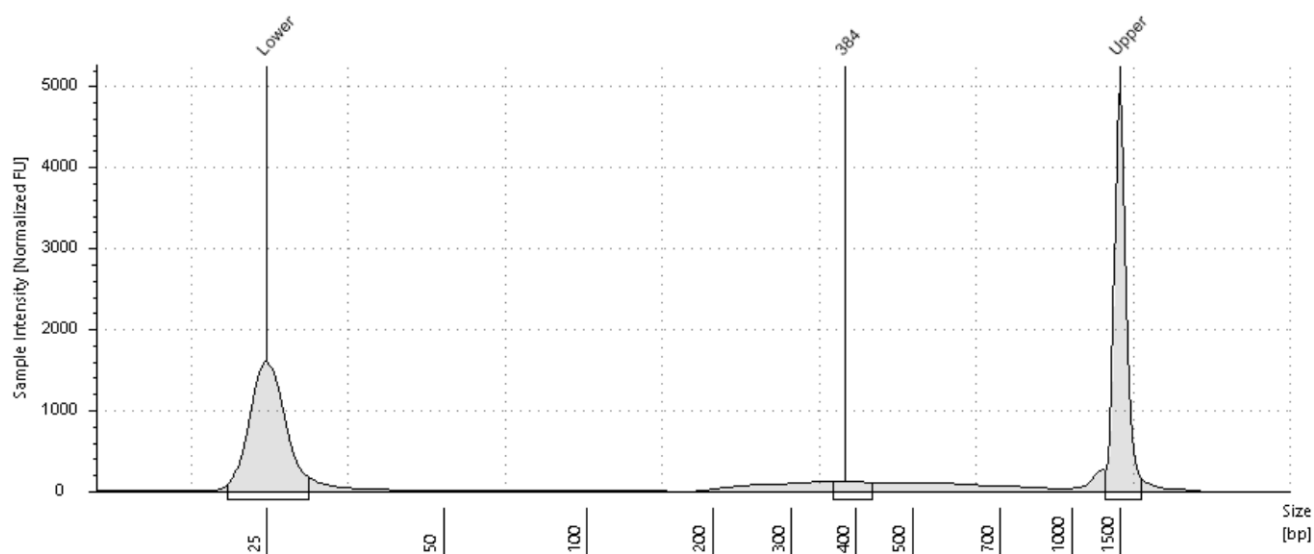


Sample Table

Well	Conc. [ng/μl]	Sample Description	Alert	Observations
A1	20.3	Electronic Ladder		Ladder

Peak Table

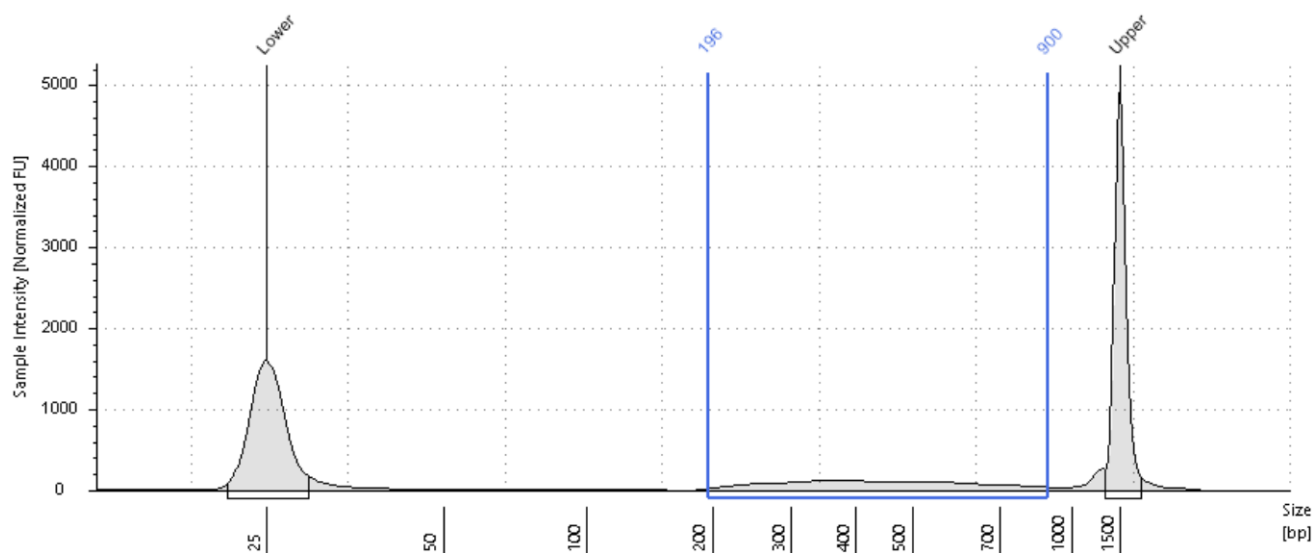
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	5.22	-	321	-		Lower Marker
50	2.25	-	69.3	11.11		
100	2.37	-	36.5	11.71		
200	2.47	-	19.0	12.20		
300	2.55	-	13.1	12.56		
400	2.57	-	9.87	12.66		
500	2.71	-	8.33	13.36		
700	2.46	-	5.41	12.15		
1000	2.89	-	4.44	14.25		
1500	6.50	6.50	6.67	-		Upper Marker

B1: LDE13392 - 1**Sample Table**

Well	Conc. [ng/μl]	Sample Description	Alert	Observations
B1	0.441	LDE13392 - 1		

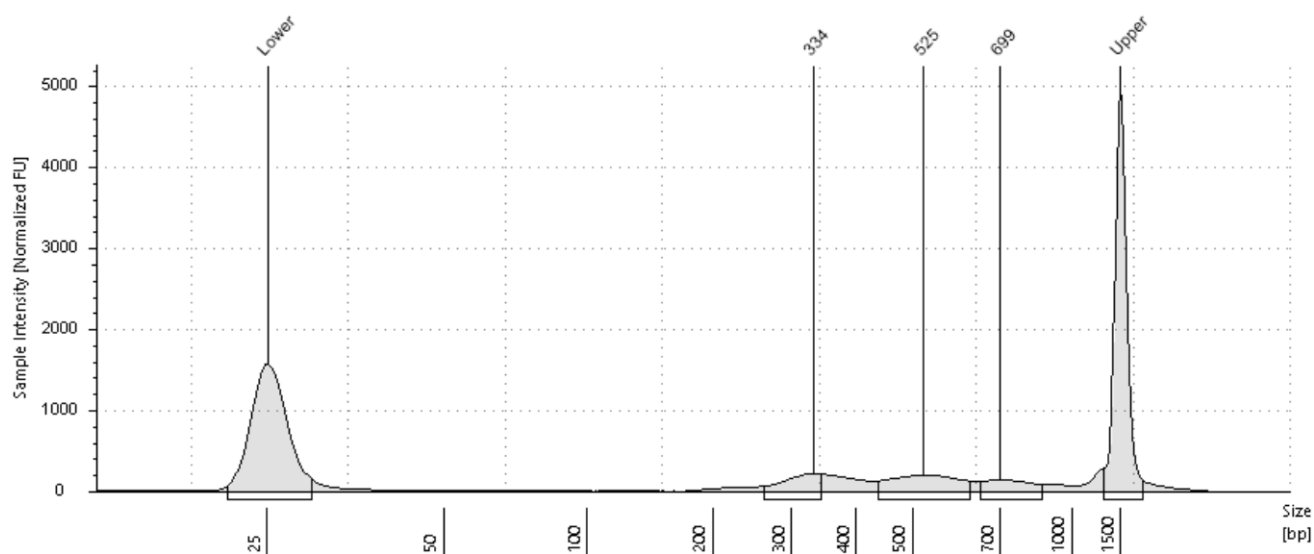
Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.32	-	389	-		Lower Marker
384	0.441	-	1.77	100.00		
1500	6.50	6.50	6.67	-		Upper Marker

**Region Table**

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
196	900	456	2.78	10.7	67.85		

C1: LDE13393 - 2

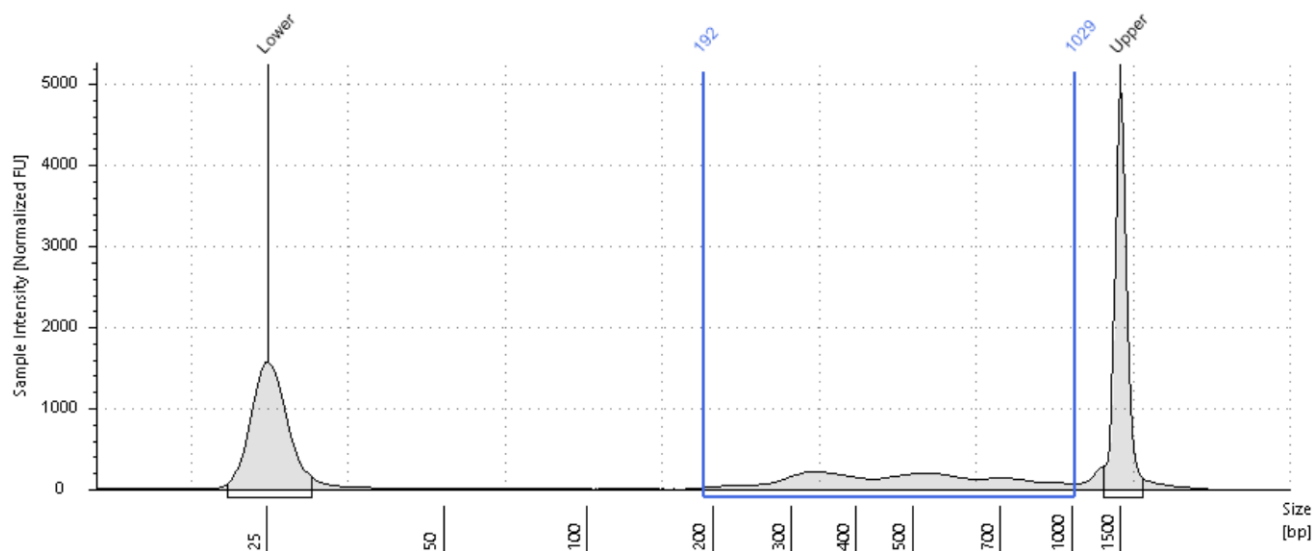


Sample Table

Well	Conc. [ng/μl]	Sample Description	Alert	Observations
C1	3.01	LDE13393 - 2		

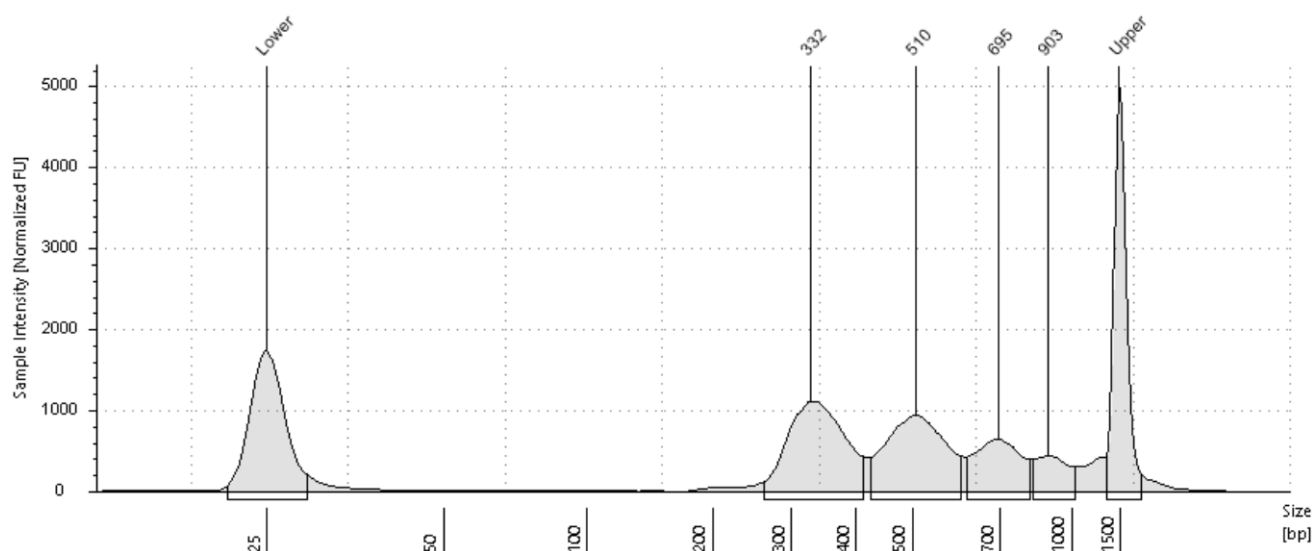
Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.25	-	385	-		Lower Marker
334	0.820	-	3.78	27.29		
525	1.49	-	4.35	49.46		
699	0.699	-	1.54	23.25		
1500	6.50	6.50	6.67	-		Upper Marker



Region Table

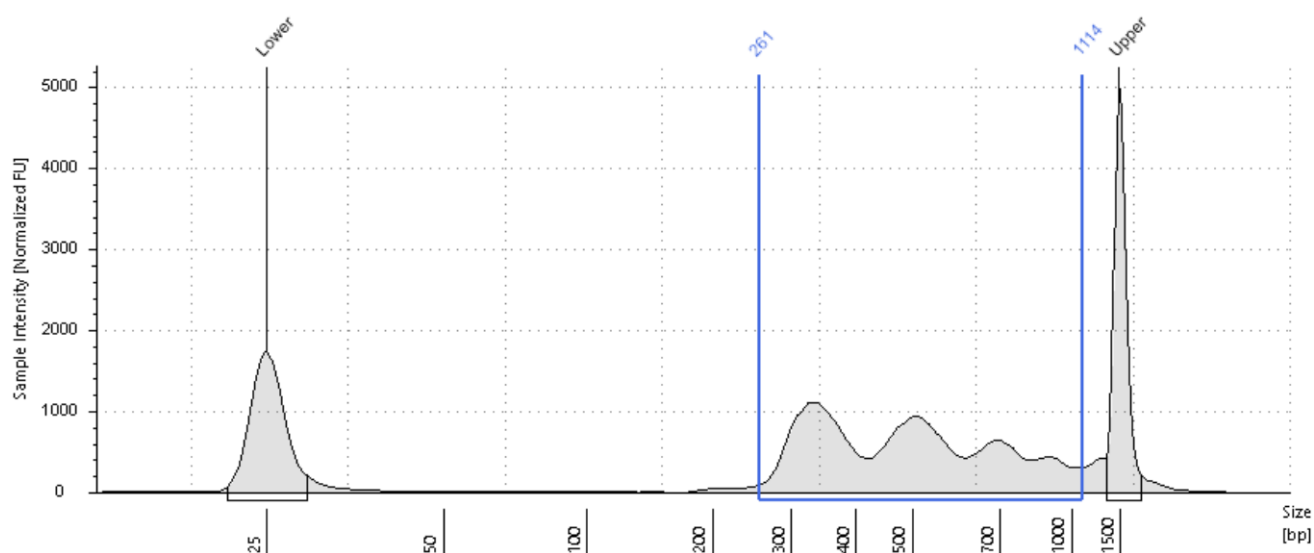
From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
192	1029	505	4.45	15.6	80.06		

D1: LDE13394 - 3**Sample Table**

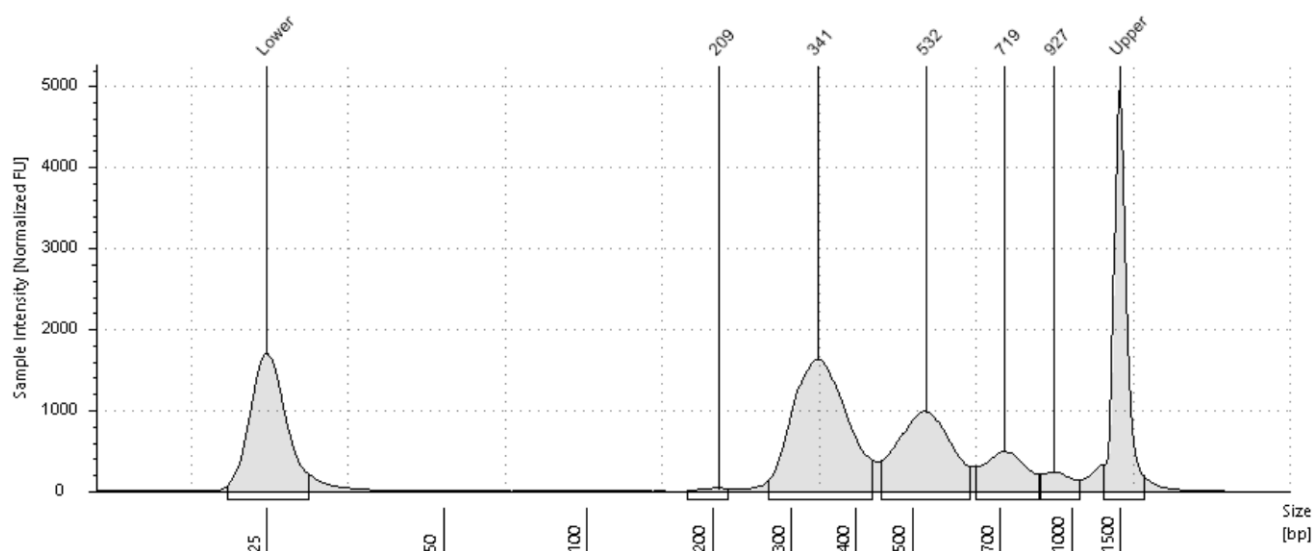
Well	Conc. [ng/μl]	Sample Description	Alert	Observations
D1	16.8	LDE13394 - 3		

Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.27	-	386	-		Lower Marker
332	6.50	-	30.2	38.74		
510	5.75	-	17.3	34.25		
695	3.04	-	6.72	18.09		
903	1.50	-	2.55	8.92		
1500	6.50	6.50	6.67	-		Upper Marker

**Region Table**

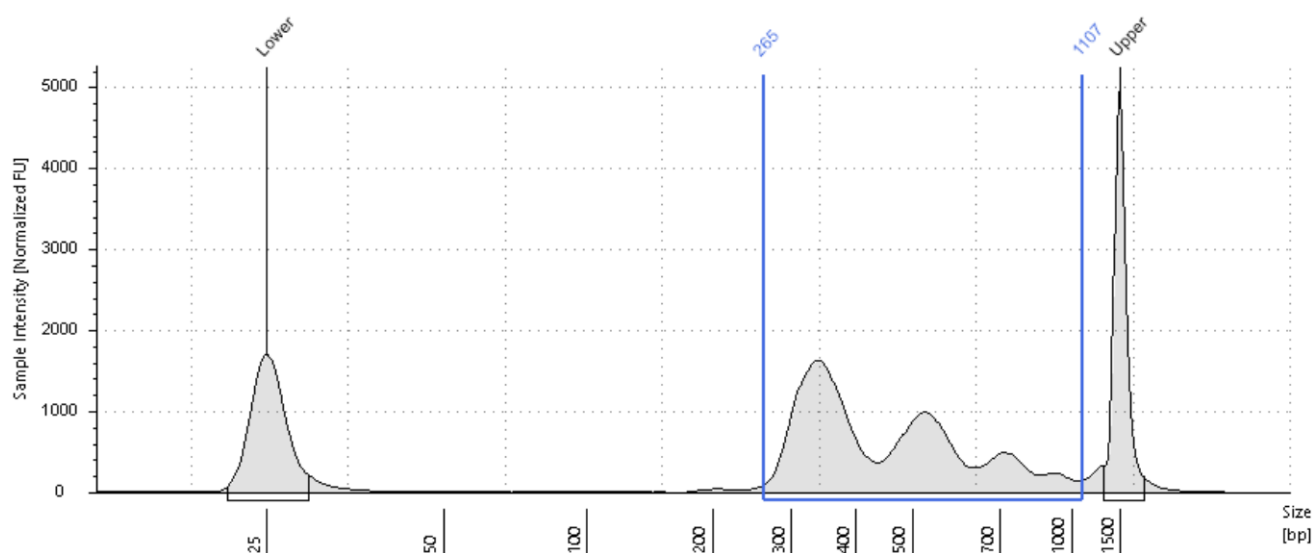
From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
261	1114	526	17.5	57.9	90.12		

E1: LDE13395 - 4**Sample Table**


Well	Conc. [ng/μl]	Sample Description	Alert	Observations
E1	17.8	LDE13395 - 4		

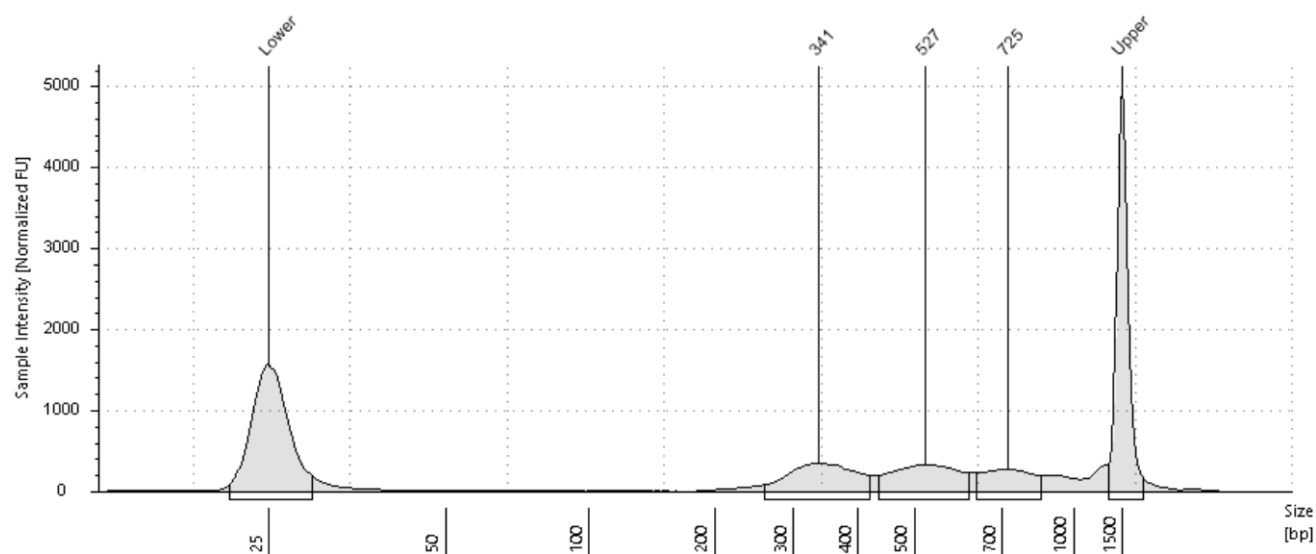
Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.38	-	393	-		Lower Marker
209	0.103	-	0.762	0.58		
341	9.26	-	41.8	52.06		
532	5.54	-	16.0	31.16		
719	2.14	-	4.59	12.06		
927	0.738	-	1.22	4.15		
1500	6.50	6.50	6.67	-		Upper Marker

**Region Table**

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
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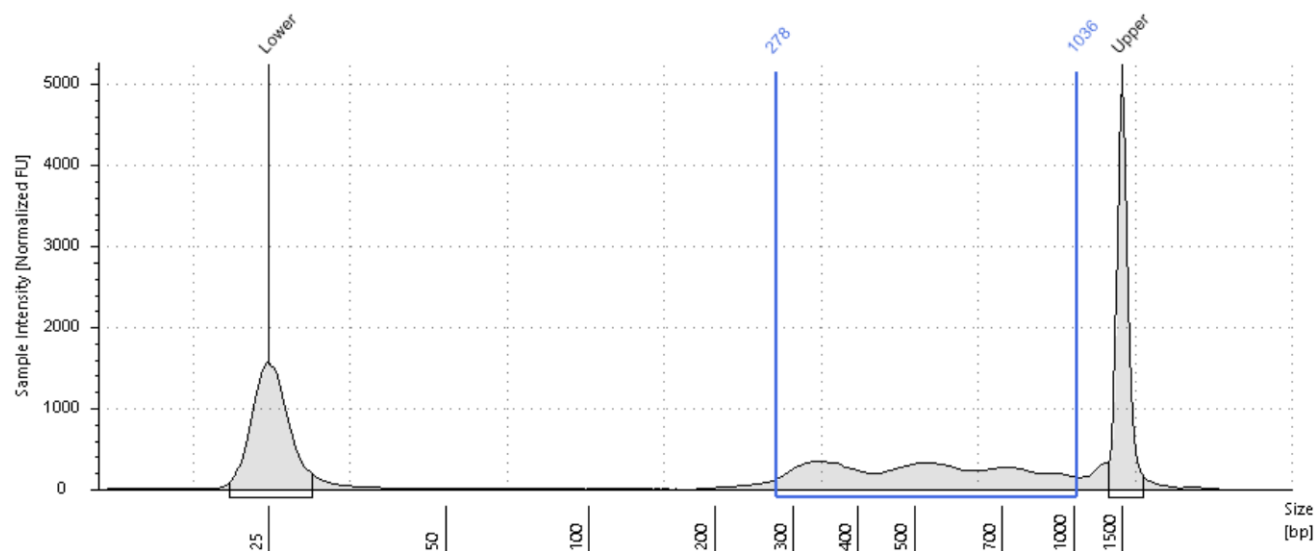
265	1107	477	18.2	65.0	92.95		
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F1: LDE13396 - 5**Sample Table**

Well	Conc. [ng/μl]	Sample Description	Alert	Observations
F1	6.70	LDE13396 - 5		

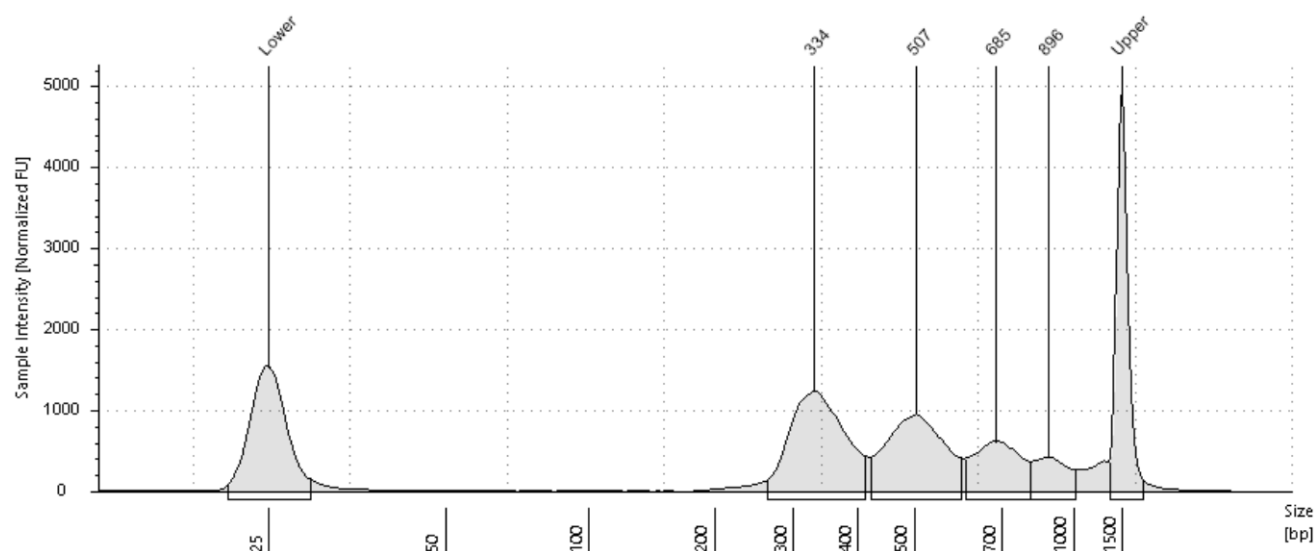
Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.63	-	408	-		Lower Marker
341	2.62	-	11.8	39.10		
527	2.51	-	7.34	37.53		
725	1.56	-	3.32	23.37		
1500	6.50	6.50	6.67	-		Upper Marker

**Region Table**

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
278	1036	548	7.57	24.0	80.64		

G1: LDE13397 - 6

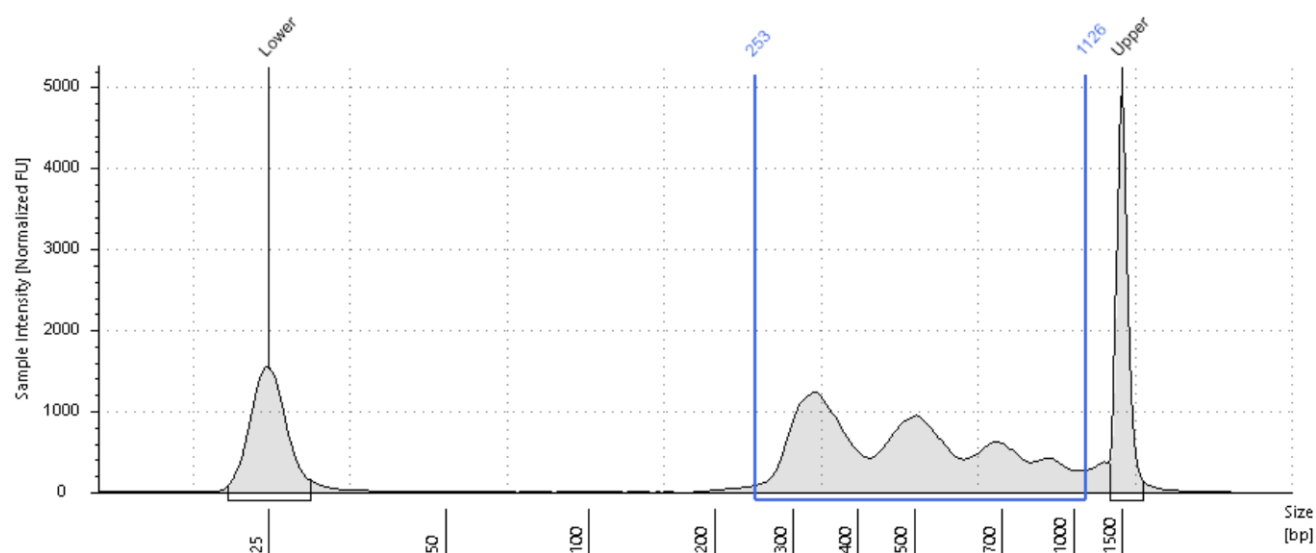


Sample Table

Well	Conc. [ng/μl]	Sample Description	Alert	Observations
G1	18.8	LDE13397 - 6		

Peak Table

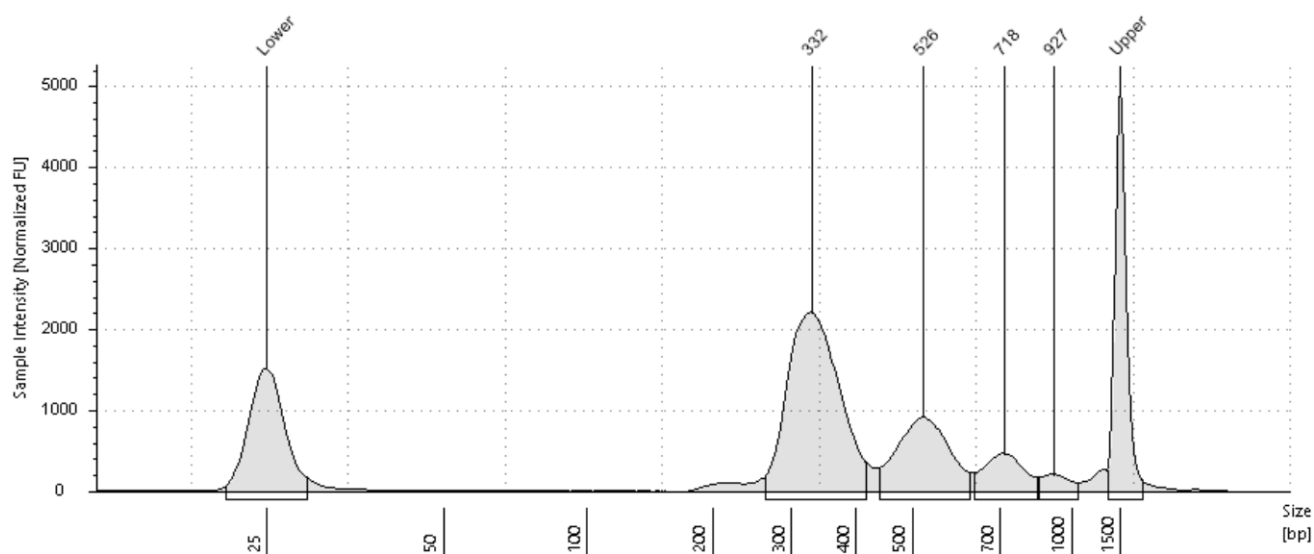
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.43	-	396	-		Lower Marker
334	7.64	-	35.2	40.64		
507	6.22	-	18.9	33.06		
685	3.32	-	7.45	17.66		
896	1.63	-	2.79	8.65		
1500	6.50	6.50	6.67	-		Upper Marker



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
253	1126	515	19.5	66.0	92.79		

H1: LDE13398 - 7

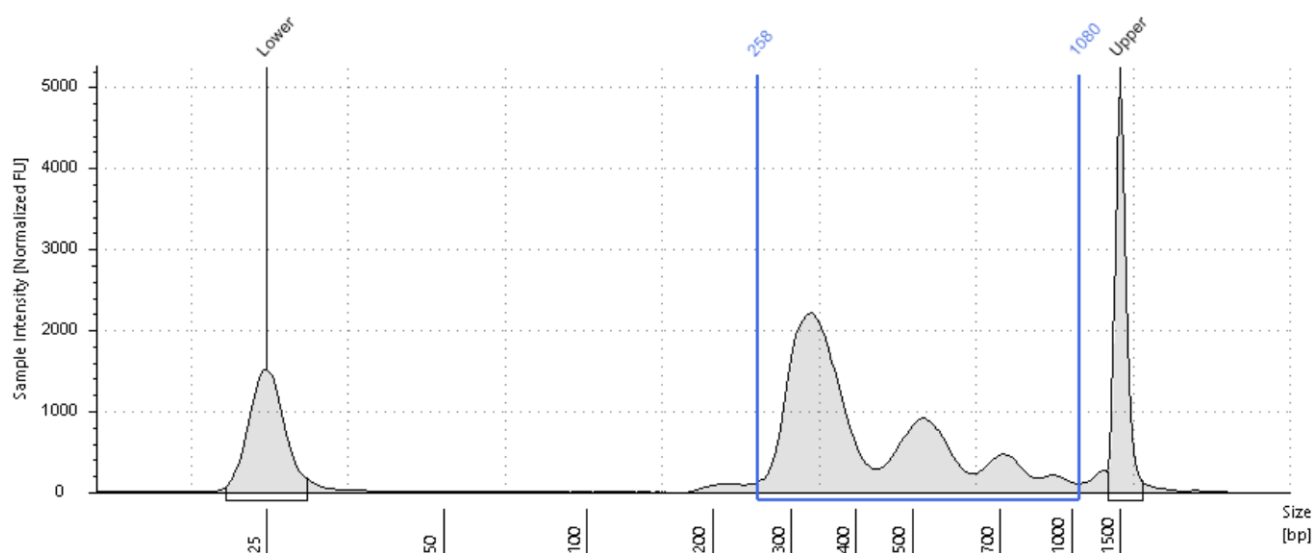


Sample Table

Well	Conc. [ng/μl]	Sample Description	Alert	Observations
H1	21.2	LDE13398 - 7		

Peak Table

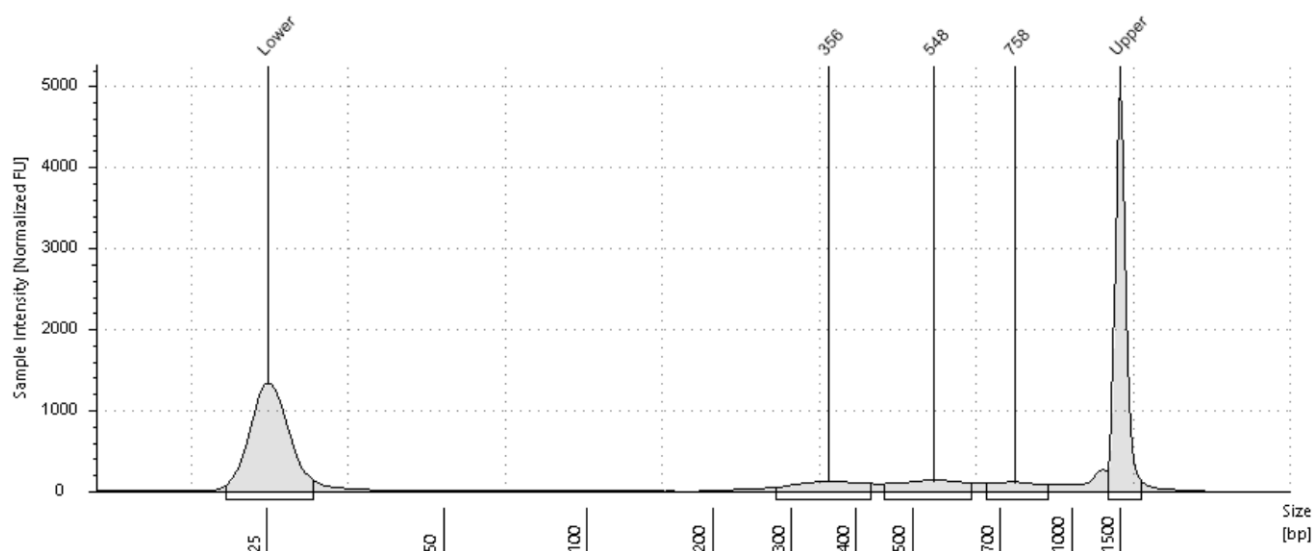
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.23	-	383	-		Lower Marker
332	13.1	-	60.6	61.68		
526	5.35	-	15.7	25.19		
718	2.10	-	4.50	9.89		
927	0.689	-	1.14	3.24		
1500	6.50	6.50	6.67	-		Upper Marker



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
258	1080	444	21.8	83.7	92.99		

A2: LDE13399 - 8

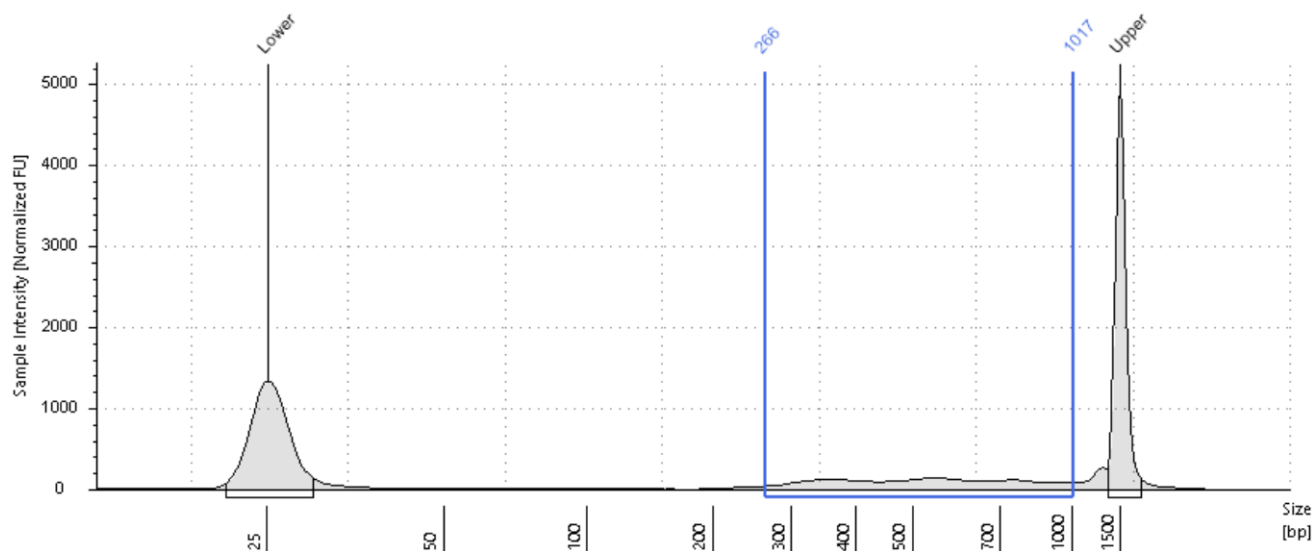


Sample Table

Well	Conc. [ng/μl]	Sample Description	Alert	Observations
A2	2.70	LDE13399 - 8		

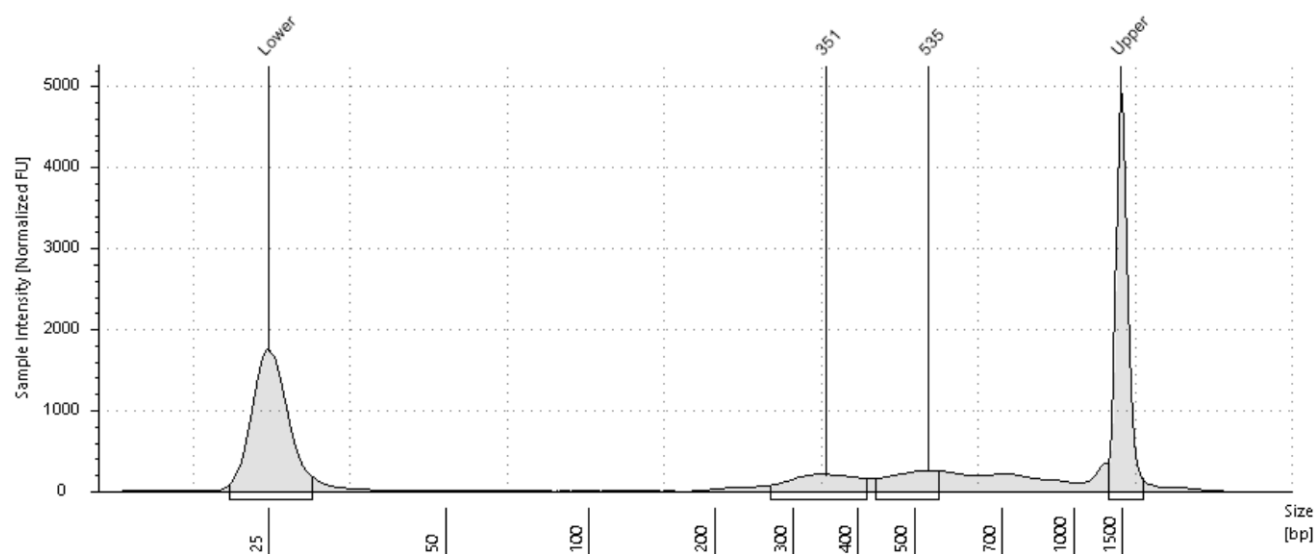
Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.32	-	389	-		Lower Marker
356	0.972	-	4.20	36.00		
548	1.07	-	3.01	39.62		
758	0.659	-	1.34	24.39		
1500	6.50	6.50	6.67	-		Upper Marker



Region Table

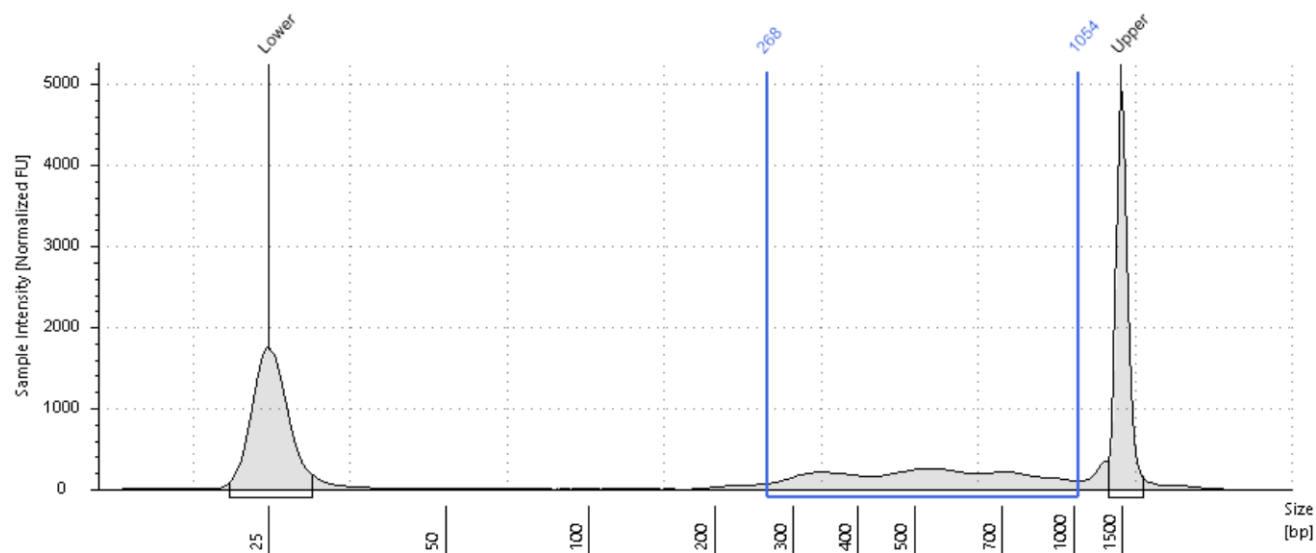
From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
266	1017	558	3.24	10.1	70.77		

B2: LDE13400 - 9**Sample Table**

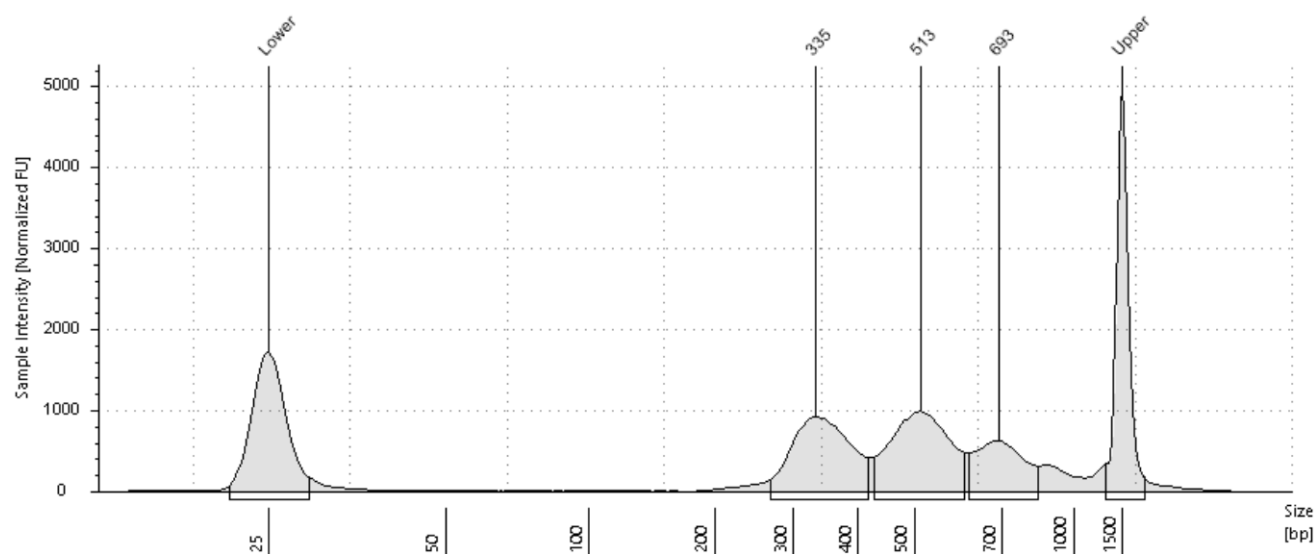
Well	Conc. [ng/μl]	Sample Description	Alert	Observations
B2	2.84	LDE13400 - 9		

Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	7.01	-	431	-		Lower Marker
351	1.54	-	6.74	54.27		
535	1.30	-	3.73	45.73		
1500	6.50	6.50	6.67	-		Upper Marker

**Region Table**

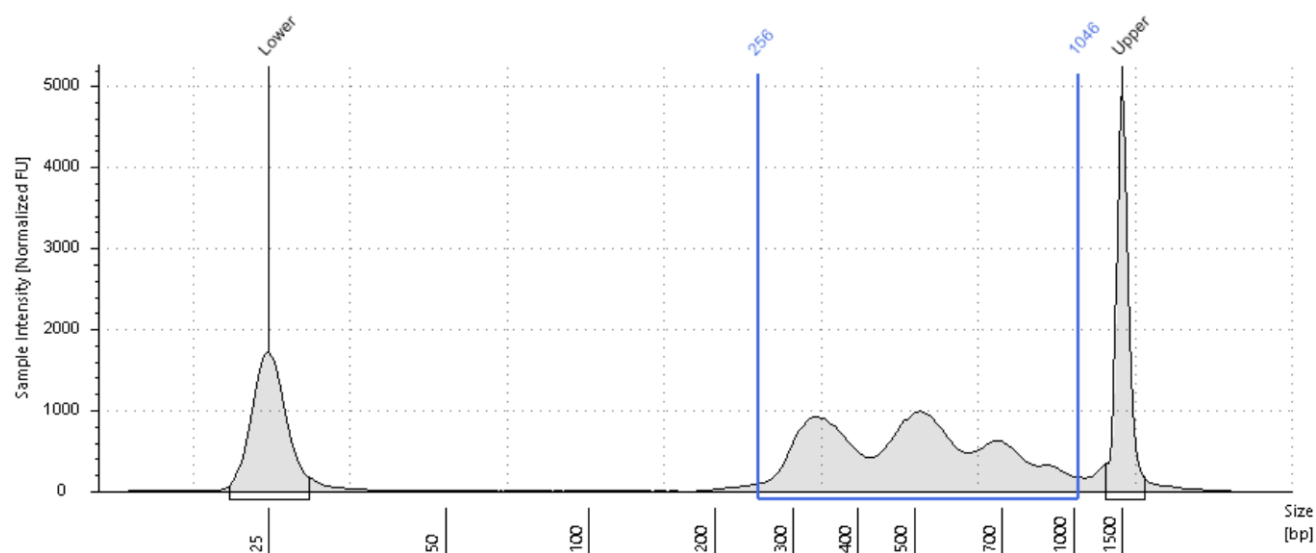
From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
268	1054	557	5.43	16.9	77.77		

C2: LDE13401 - 10**Sample Table**

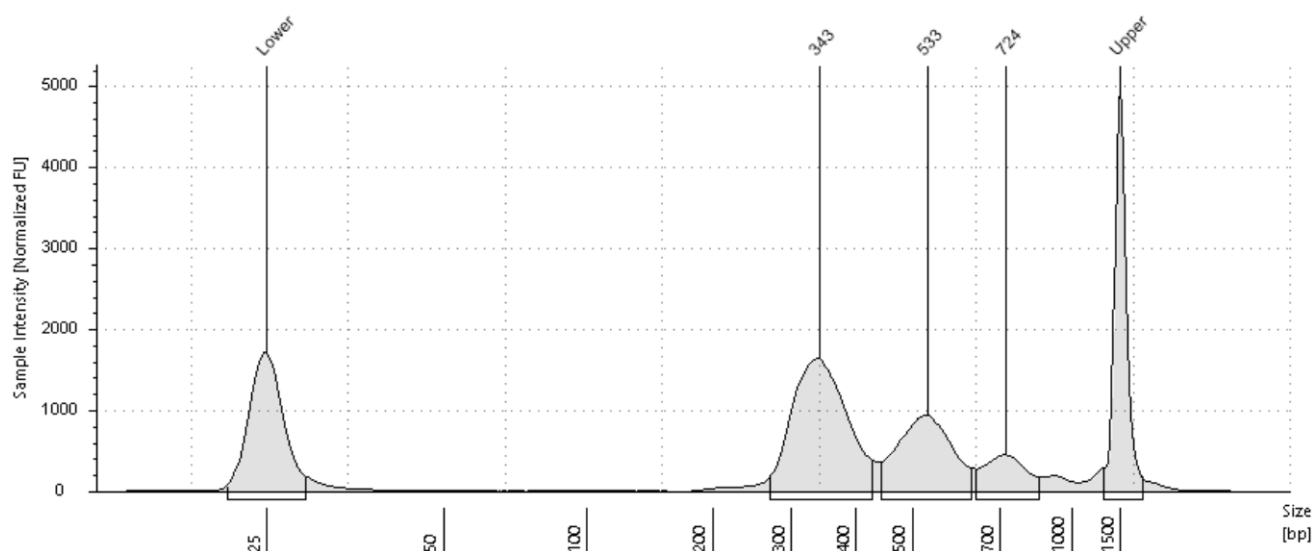
Well	Conc. [ng/μl]	Sample Description	Alert	Observations
C2	15.3	LDE13401 - 10		

Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.38	-	393	-		Lower Marker
335	5.83	-	26.8	38.05		
513	6.27	-	18.8	40.97		
693	3.21	-	7.14	20.99		
1500	6.50	6.50	6.67	-		Upper Marker

**Region Table**

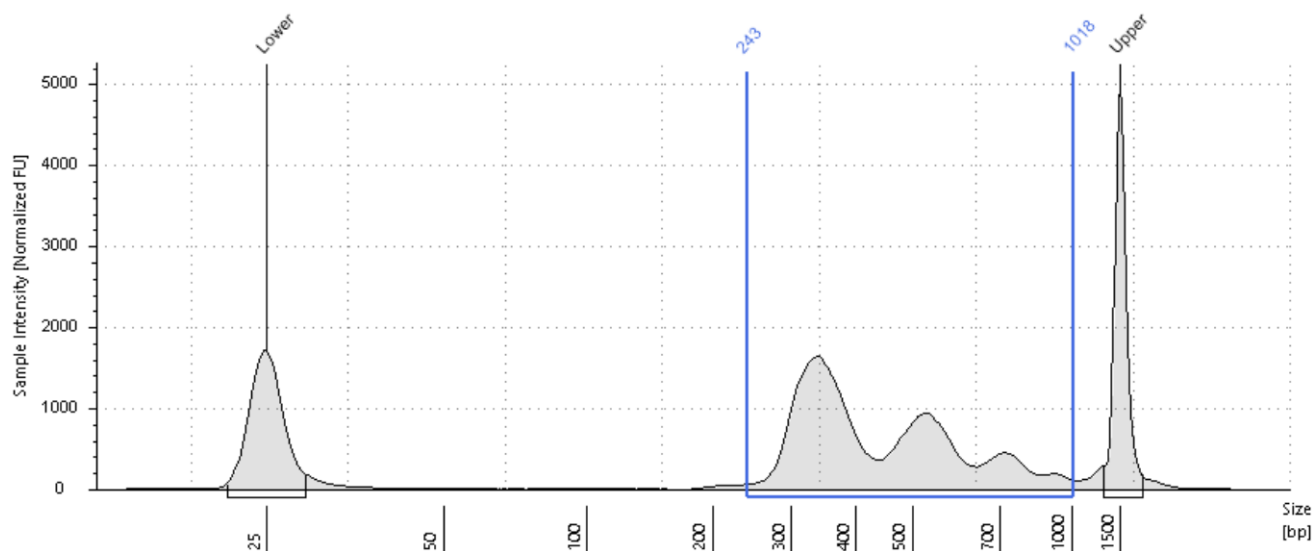
From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
256	1046	517	16.8	55.5	91.79		

D2: LDE13402 - 11**Sample Table**

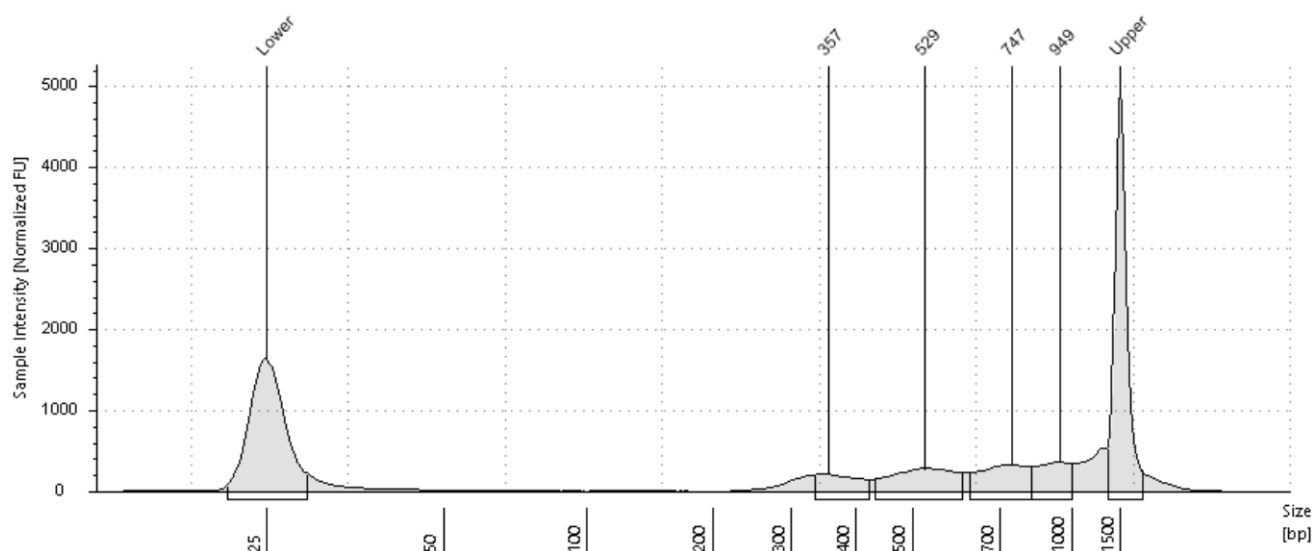
Well	Conc. [ng/μl]	Sample Description	Alert	Observations
D2	17.4	LDE13402 - 11		

Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.45	-	397	-		Lower Marker
343	9.86	-	44.2	56.56		
533	5.54	-	16.0	31.75		
724	2.04	-	4.33	11.68		
1500	6.50	6.50	6.67	-		Upper Marker

**Region Table**

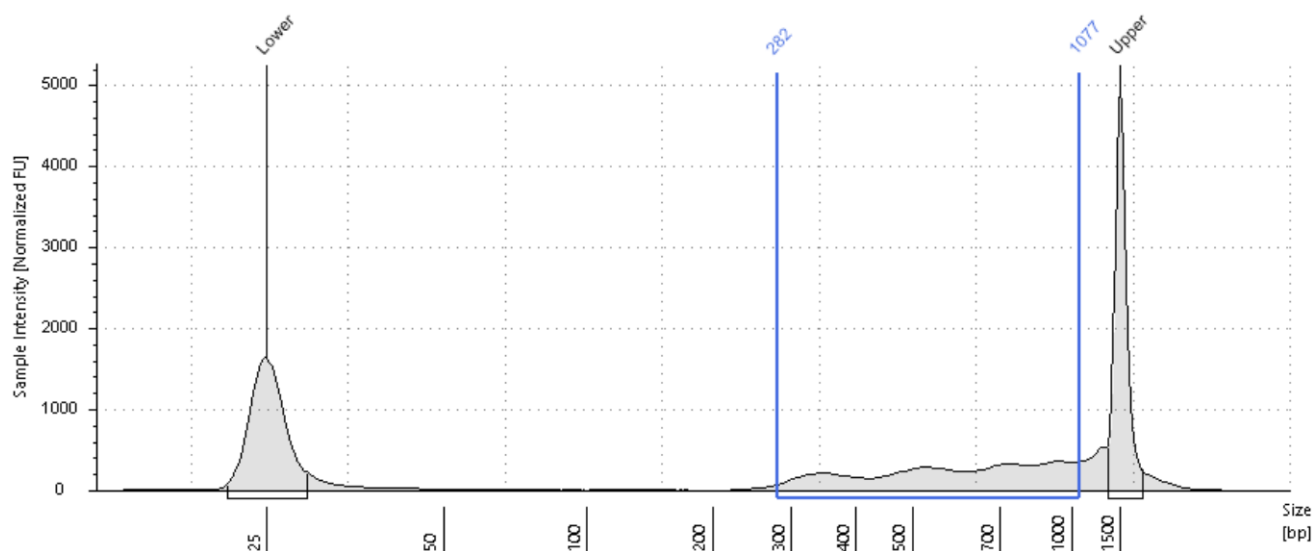
From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
243	1018	464	18.6	68.0	92.97		

E2: LDE13403 - 12**Sample Table**

Well	Conc. [ng/μl]	Sample Description	Alert	Observations
E2	5.88	LDE13403 - 12		

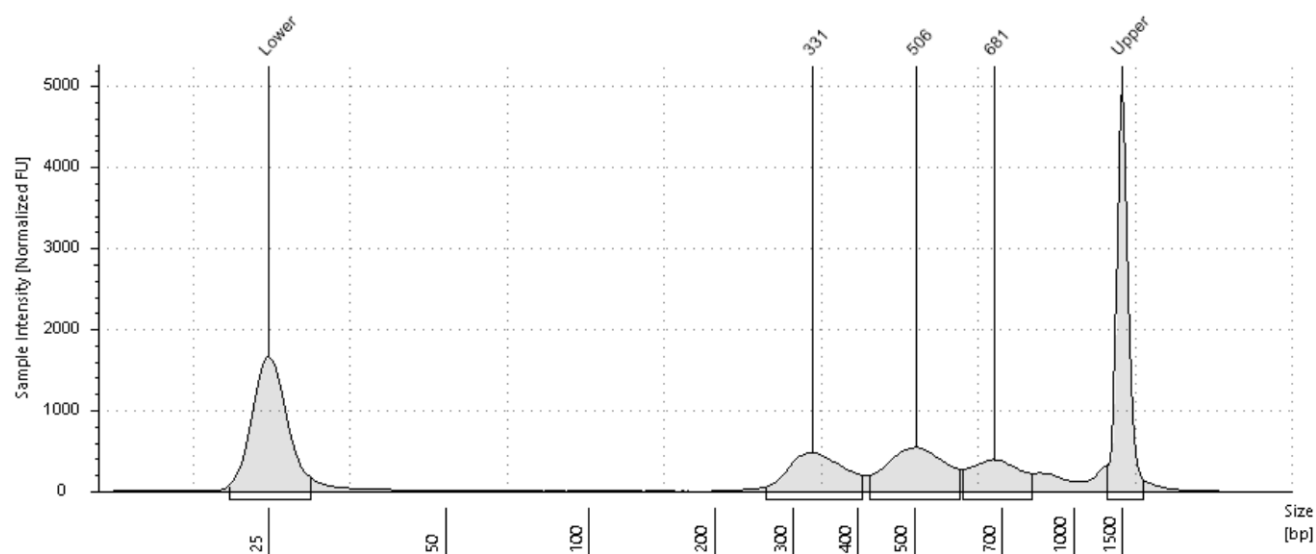
Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.30	-	388	-		Lower Marker
357	0.922	-	3.97	15.66		
529	1.95	-	5.68	33.16		
747	1.72	-	3.55	29.31		
949	1.29	-	2.09	21.87		
1500	6.50	6.50	6.67	-		Upper Marker

**Region Table**

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
282	1077	633	6.80	18.8	74.20		

F2: LDE13404 - 13

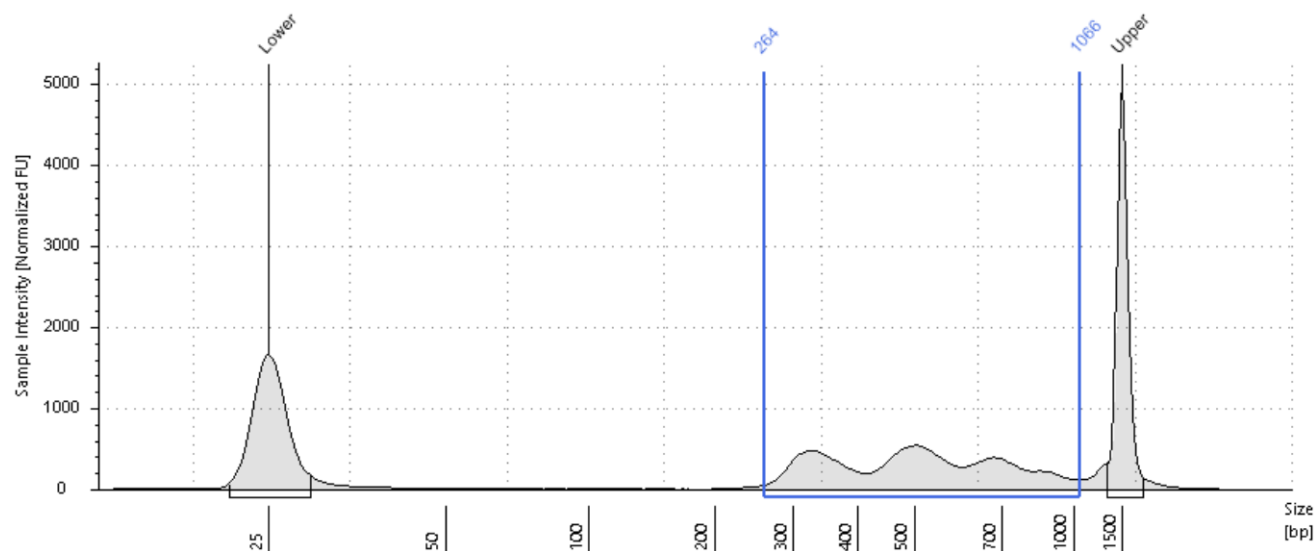


Sample Table

Well	Conc. [ng/μl]	Sample Description	Alert	Observations
F2	8.59	LDE13404 - 13		

Peak Table

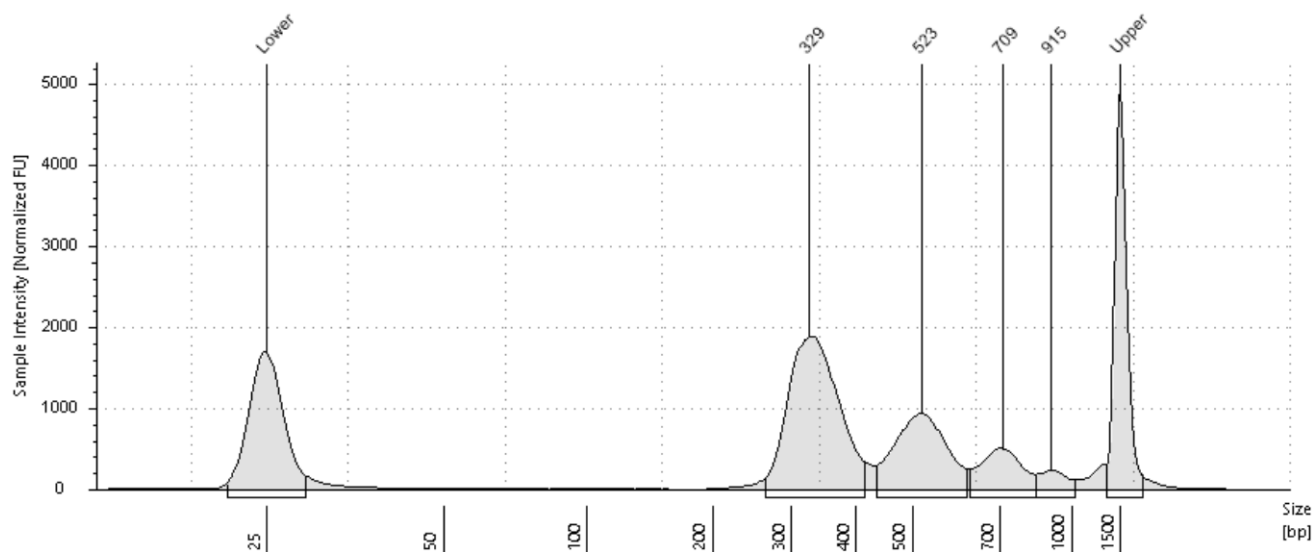
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.56	-	404	-		Lower Marker
331	2.93	-	13.6	34.10		
506	3.50	-	10.6	40.71		
681	2.16	-	4.89	25.20		
1500	6.50	6.50	6.67	-		Upper Marker



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
264	1066	534	9.60	30.9	88.06		

G2: LDE13405 - 14

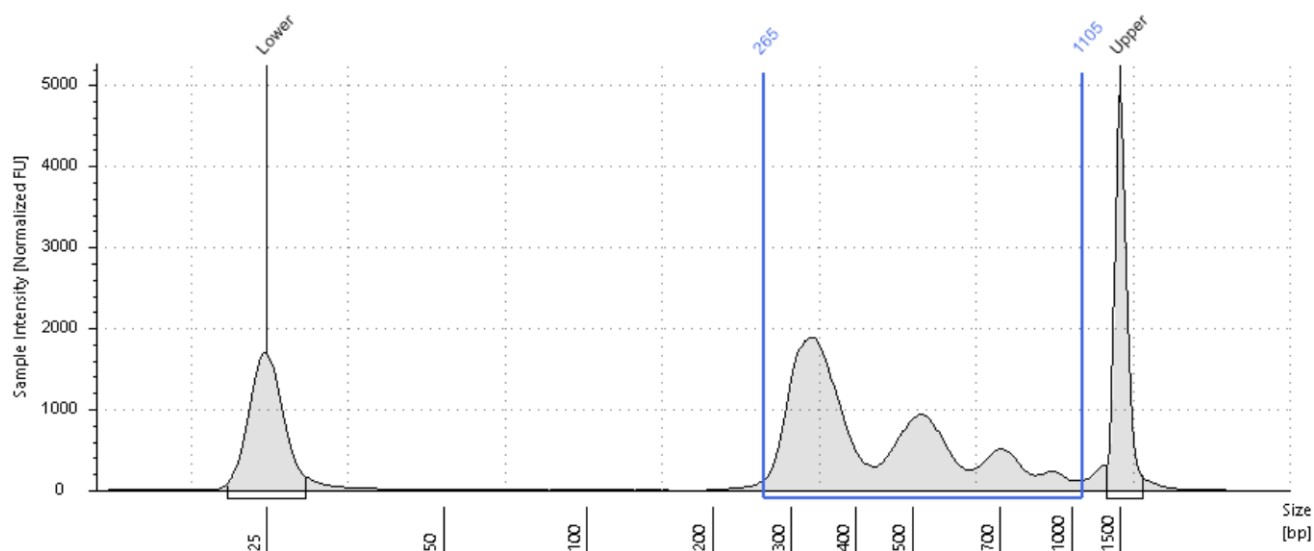


Sample Table

Well	Conc. [ng/μl]	Sample Description	Alert	Observations
G2	18.5	LDE13405 - 14		

Peak Table

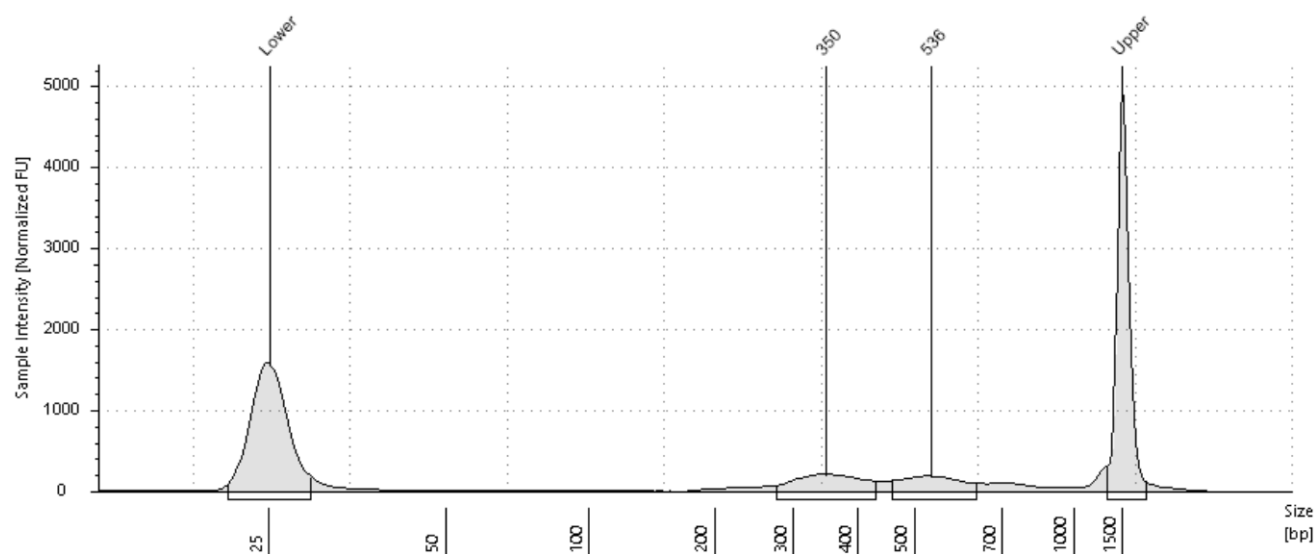
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.39	-	393	-		Lower Marker
329	10.4	-	48.6	55.99		
523	5.24	-	15.4	28.30		
709	2.22	-	4.81	11.97		
915	0.692	-	1.16	3.74		
1500	6.50	6.50	6.67	-		Upper Marker



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
265	1105	460	19.0	70.8	93.40		

H2: LDE13406 - 15

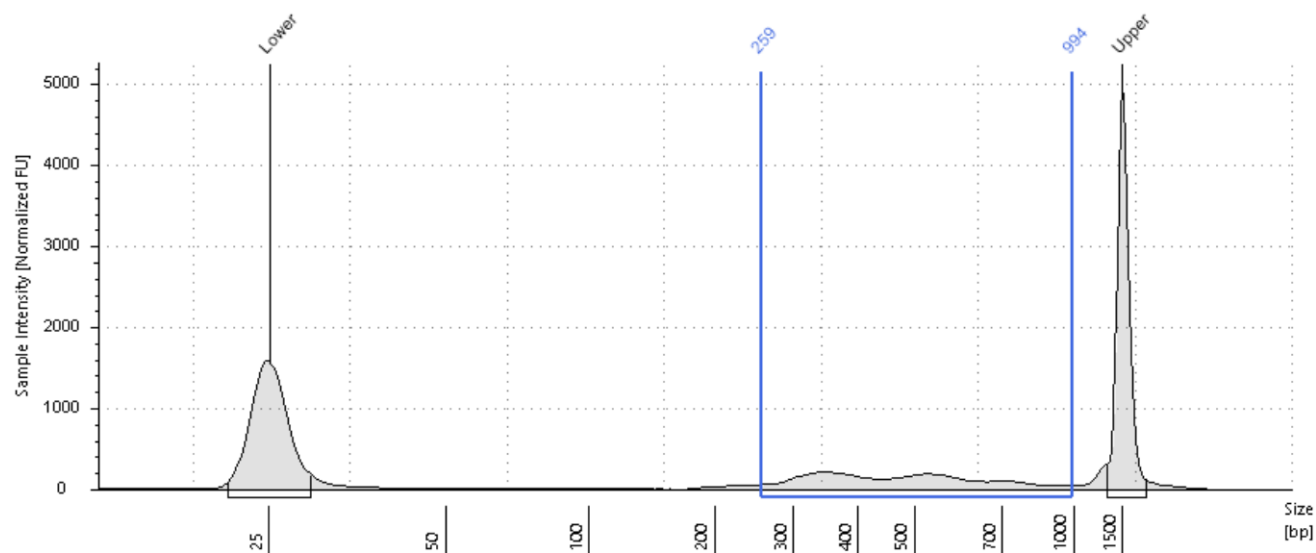


Sample Table

Well	Conc. [ng/μl]	Sample Description	Alert	Observations
H2	2.73	LDE13406 - 15		

Peak Table

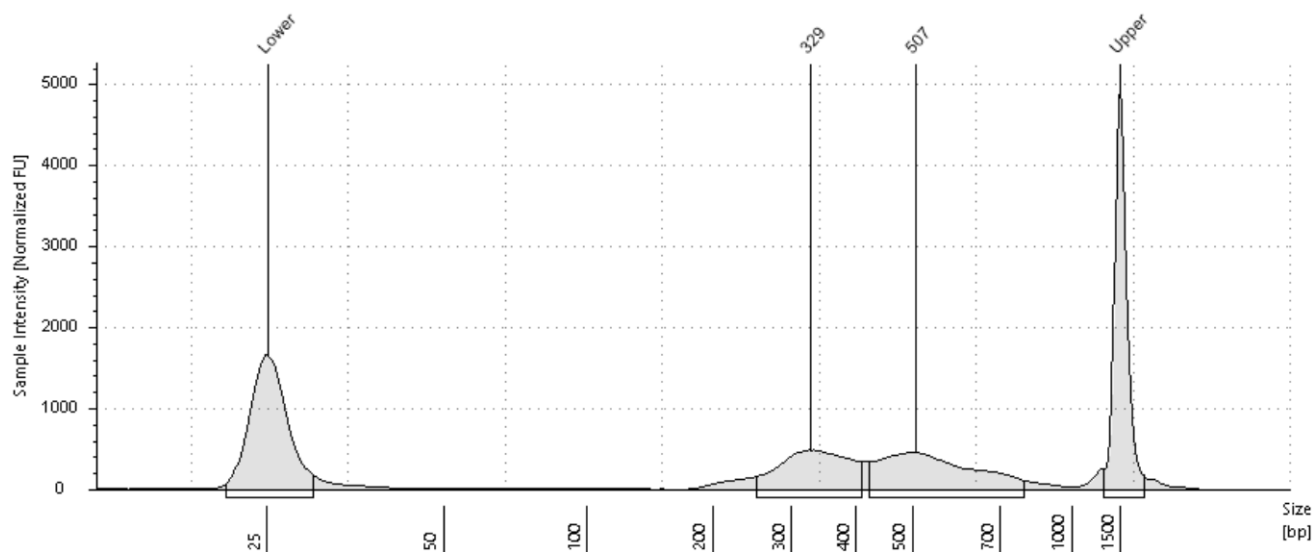
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.46	-	397	-		Lower Marker
350	1.52	-	6.70	55.90		
536	1.20	-	3.45	44.10		
1500	6.50	6.50	6.67	-		Upper Marker



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
259	994	493	3.62	12.5	73.09		

A3: LDE13407 - 16

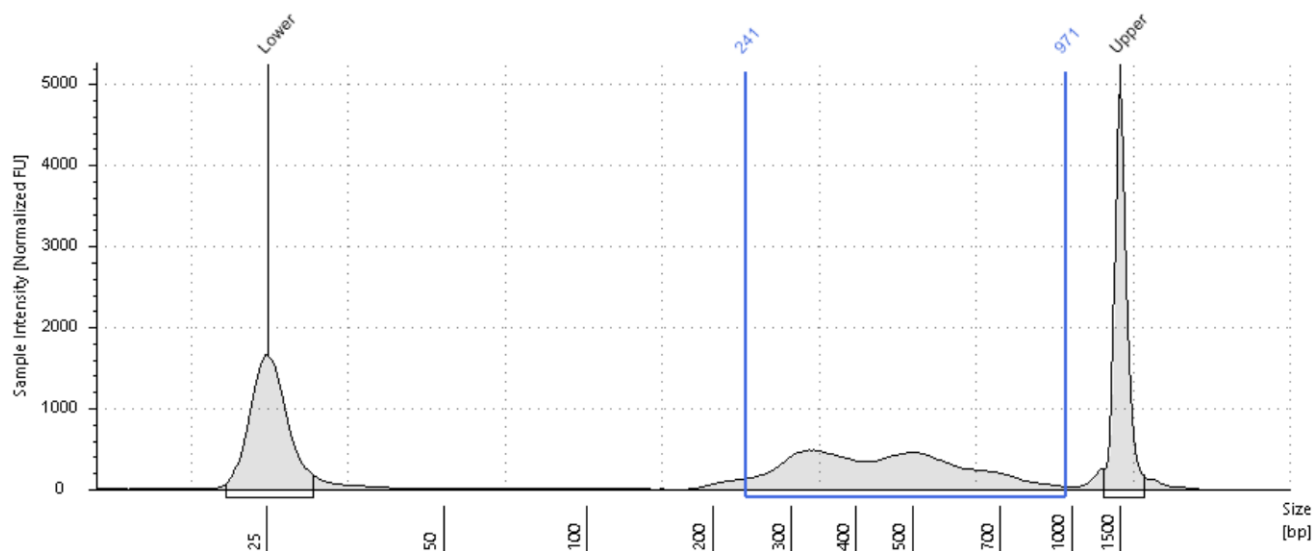


Sample Table

Well	Conc. [ng/μl]	Sample Description	Alert	Observations
A3	8.06	LDE13407 - 16		

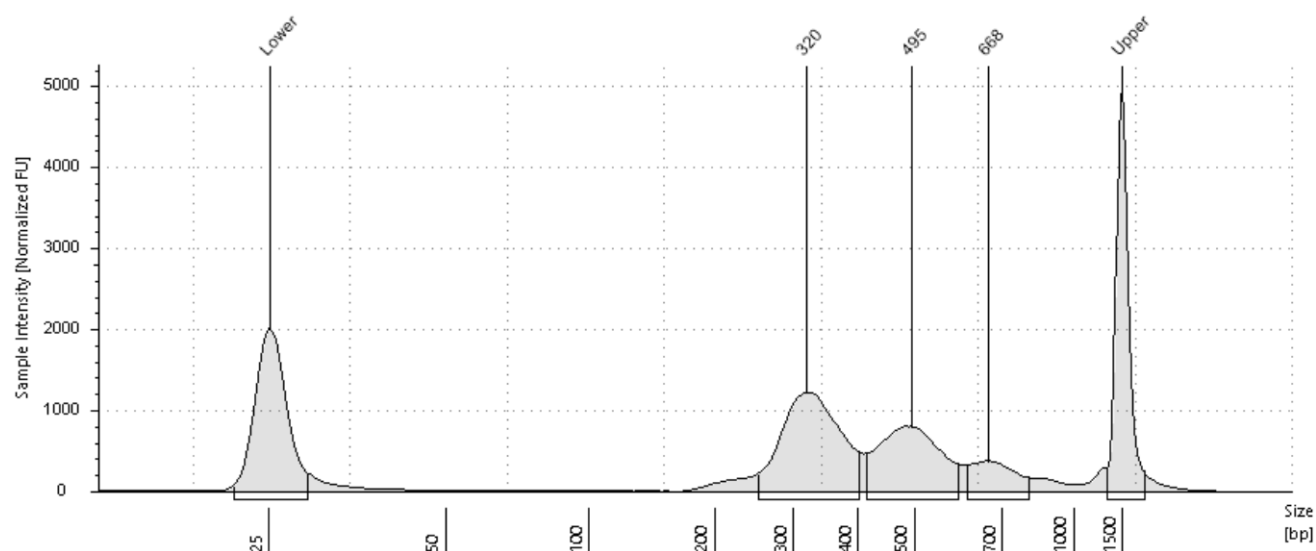
Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.59	-	405	-		Lower Marker
329	3.62	-	16.9	44.93		
507	4.44	-	13.5	55.07		
1500	6.50	6.50	6.67	-		Upper Marker



Region Table

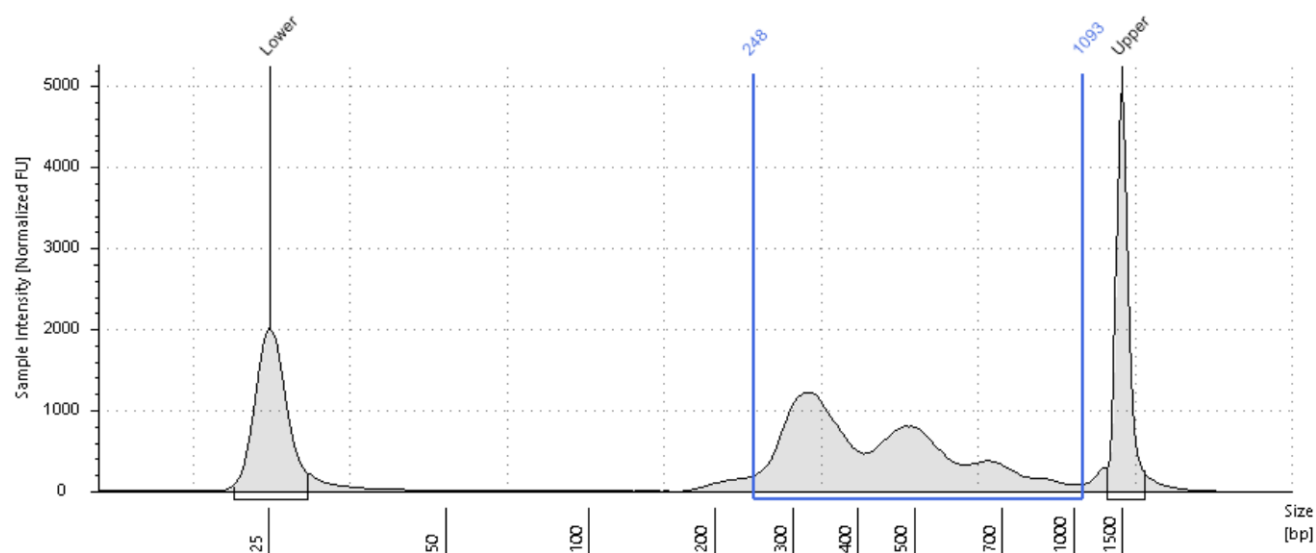
From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
241	971	464	8.62	31.5	85.14		

B3: LDE13408 - 17**Sample Table**

Well	Conc. [ng/μl]	Sample Description	Alert	Observations
B3	14.4	LDE13408 - 17		

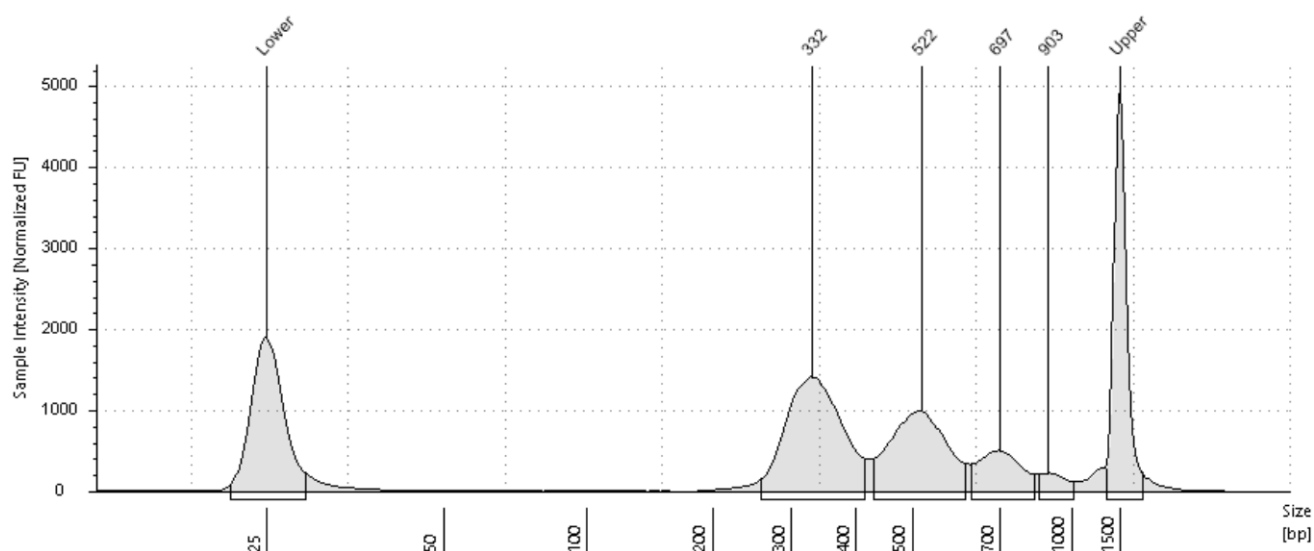
Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.66	-	410	-		Lower Marker
320	7.49	-	36.0	52.19		
495	5.14	-	16.0	35.82		
668	1.72	-	3.97	11.99		
1500	6.50	6.50	6.67	-		Upper Marker

**Region Table**

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
248	1093	452	15.6	58.6	88.42		

C3: LDE13409 - 18

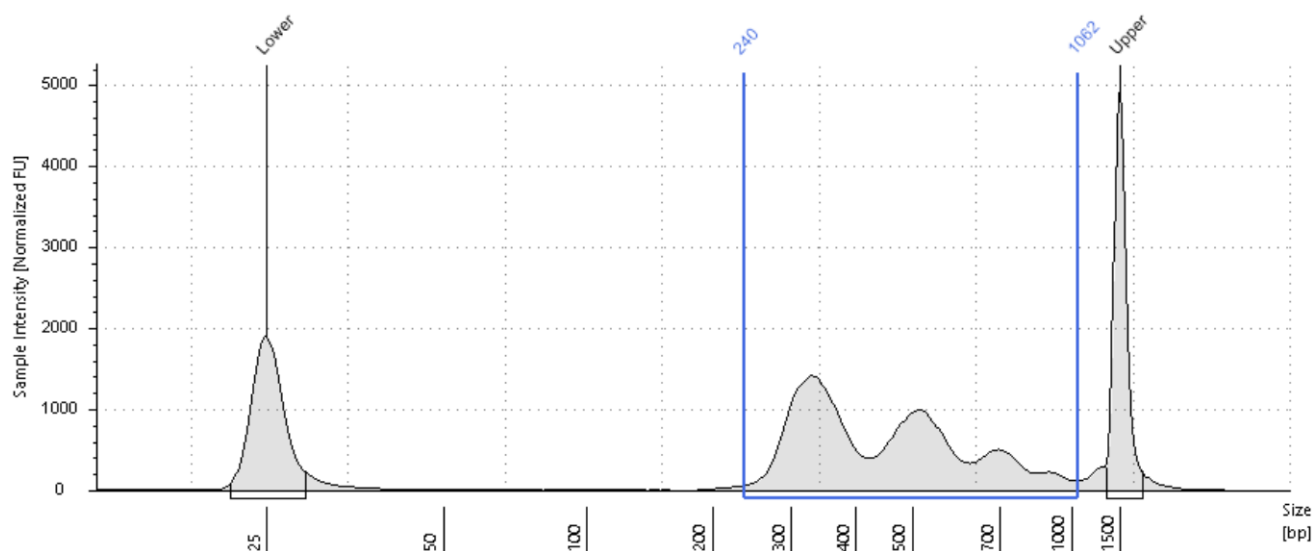


Sample Table

Well	Conc. [ng/μl]	Sample Description	Alert	Observations
C3	16.7	LDE13409 - 18		

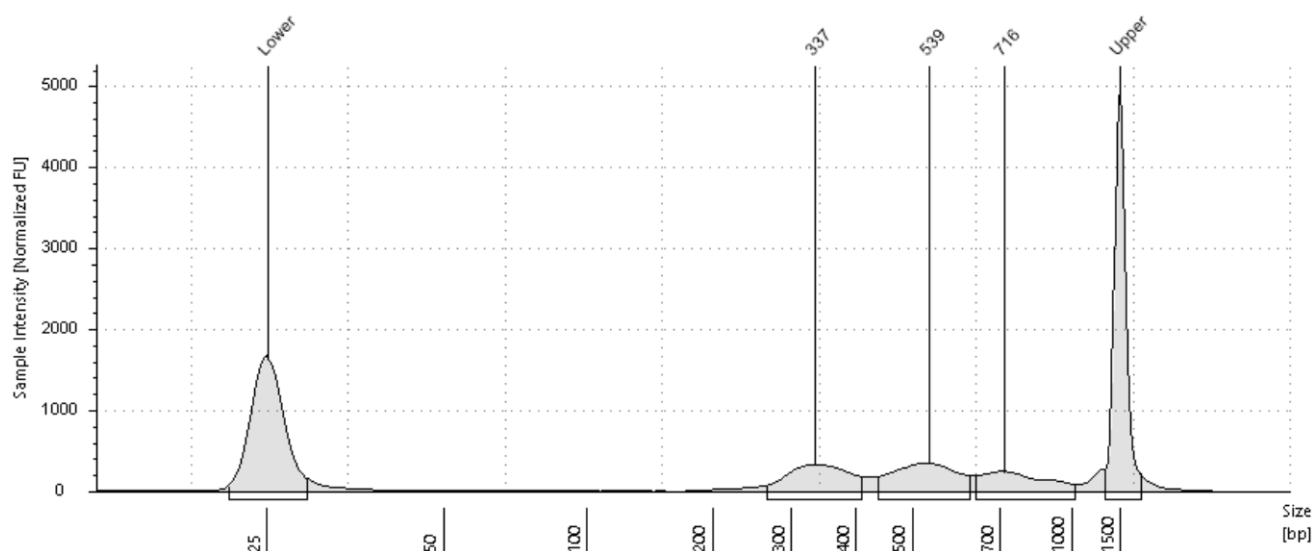
Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.39	-	394	-		Lower Marker
332	8.17	-	37.9	48.77		
522	5.76	-	17.0	34.42		
697	2.22	-	4.89	13.24		
903	0.599	-	1.02	3.57		
1500	6.50	6.50	6.67	-		Upper Marker



Region Table

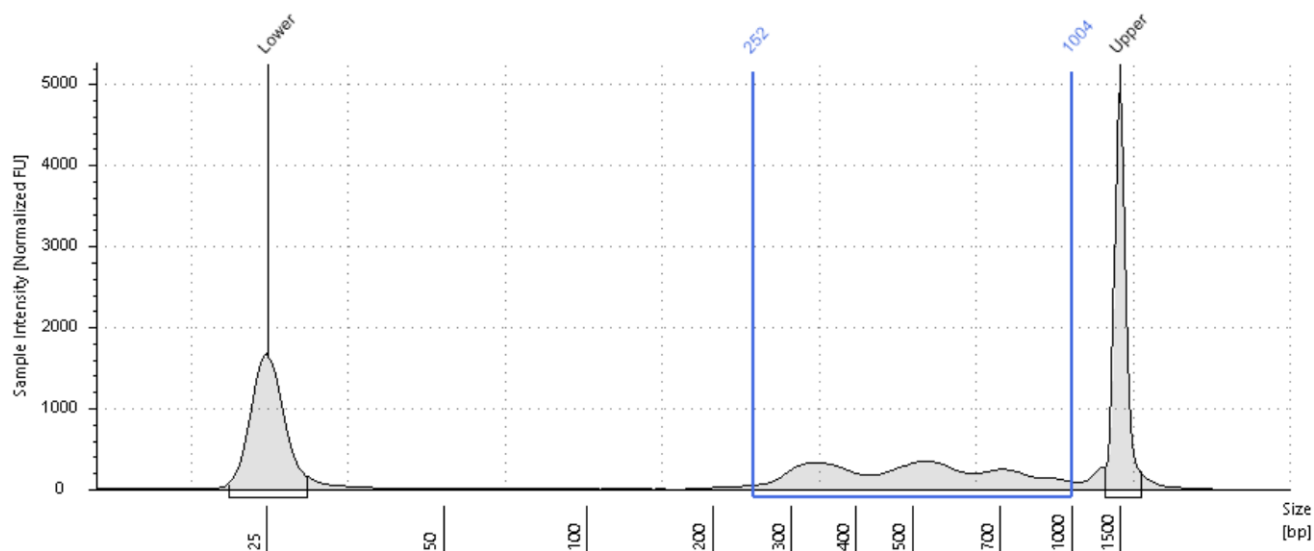
From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
240	1062	472	17.4	63.1	92.27		

D3: LDE13410 - 19**Sample Table**

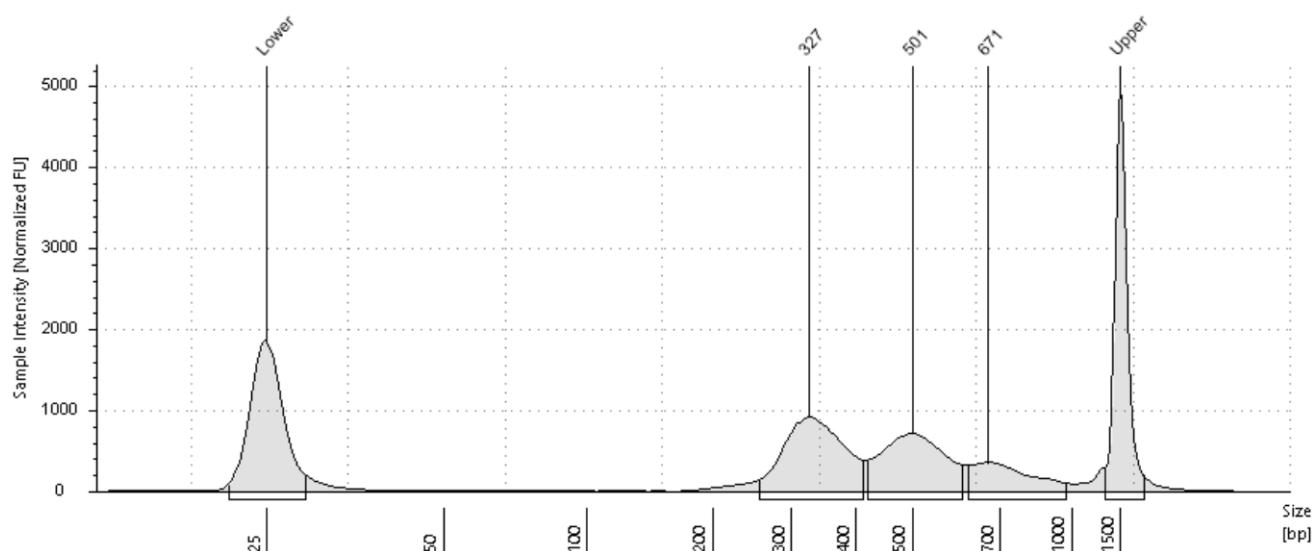
Well	Conc. [ng/μl]	Sample Description	Alert	Observations
D3	6.47	LDE13410 - 19		

Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.34	-	390	-		Lower Marker
337	2.28	-	10.4	35.32		
539	2.46	-	7.02	38.03		
716	1.72	-	3.70	26.65		
1500	6.50	6.50	6.67	-		Upper Marker

**Region Table**

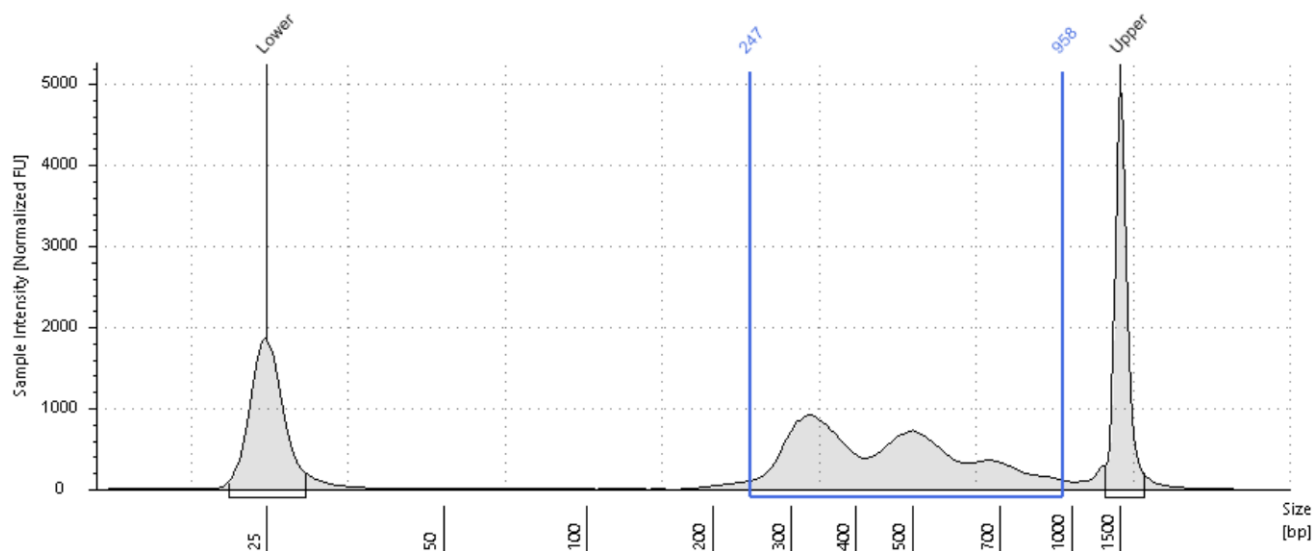
From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
252	1004	524	6.87	22.7	83.12		

E3: LDE13411 - 20**Sample Table**

Well	Conc. [ng/μl]	Sample Description	Alert	Observations
E3	12.7	LDE13411 - 20		

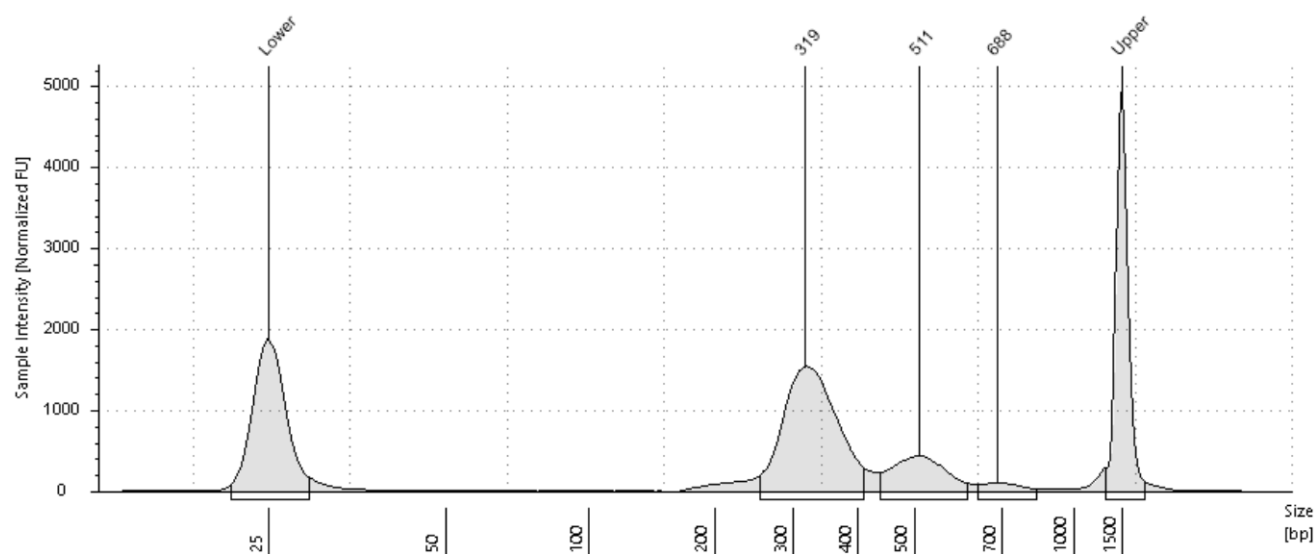
Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.50	-	400	-		Lower Marker
327	5.75	-	27.0	45.22		
501	4.75	-	14.6	37.35		
671	2.22	-	5.08	17.43		
1500	6.50	6.50	6.67	-		Upper Marker

**Region Table**

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
247	958	470	13.0	47.1	89.29		

F3: LDE13412 - 21

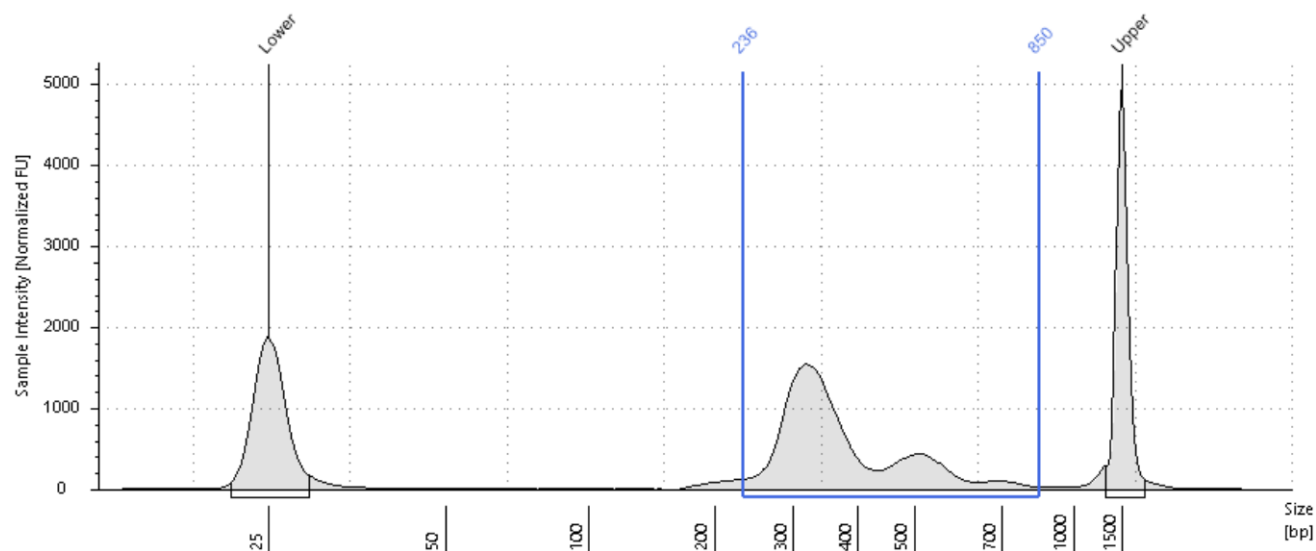


Sample Table

Well	Conc. [ng/μl]	Sample Description	Alert	Observations
F3	12.0	LDE13412 - 21		

Peak Table

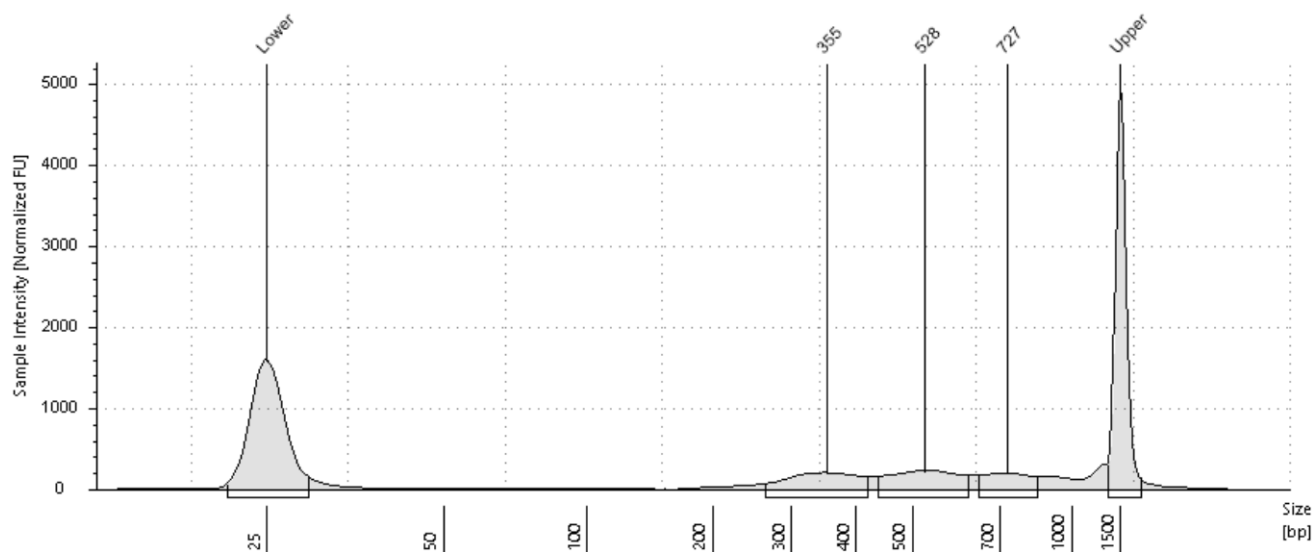
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.75	-	416	-		Lower Marker
319	9.05	-	43.7	75.32		
511	2.54	-	7.64	21.12		
688	0.428	-	0.956	3.56		
1500	6.50	6.50	6.67	-		Upper Marker



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
236	850	384	12.6	54.0	89.75		

G3: LDE13413 - 22

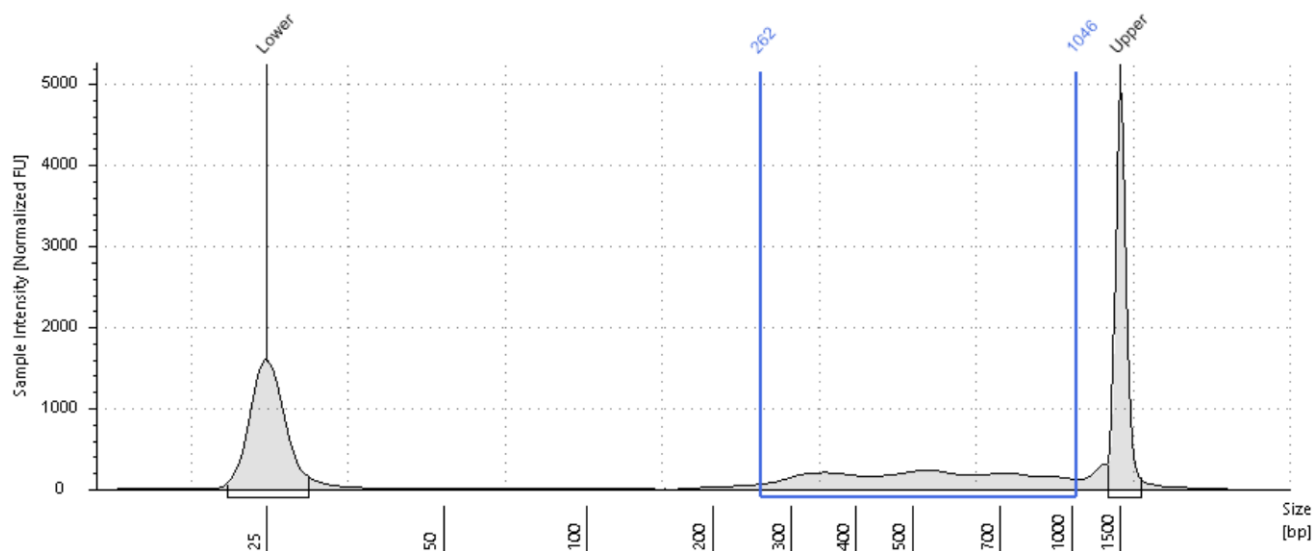


Sample Table

Well	Conc. [ng/μl]	Sample Description	Alert	Observations
G3	4.63	LDE13413 - 22		

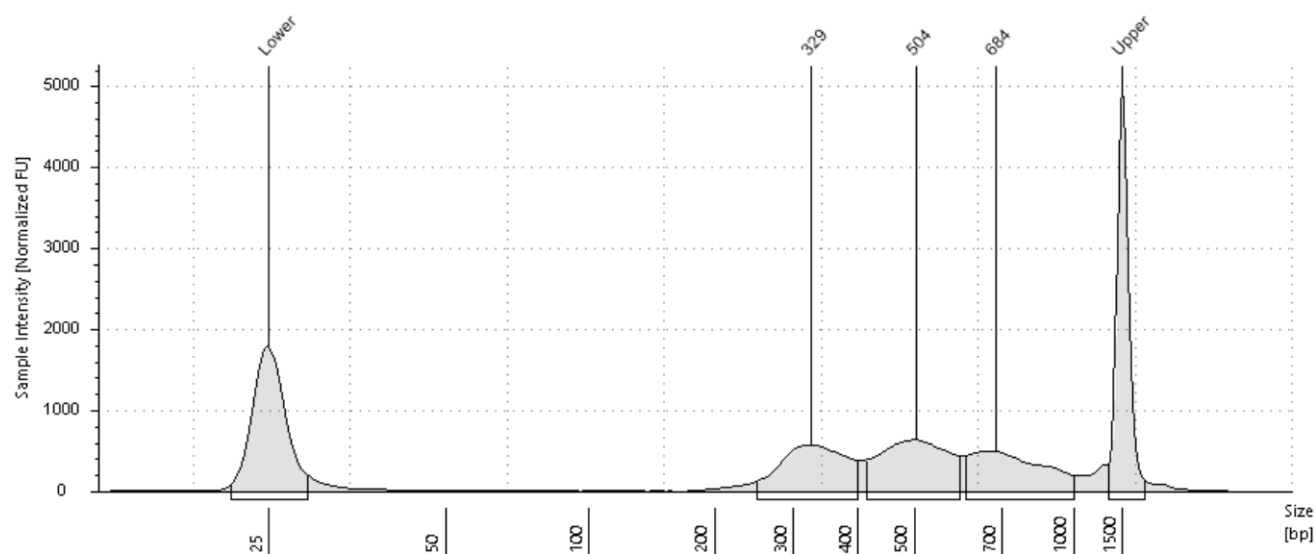
Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.58	-	405	-		Lower Marker
355	1.69	-	7.34	36.54		
528	1.83	-	5.33	39.52		
727	1.11	-	2.35	23.94		
1500	6.50	6.50	6.67	-		Upper Marker



Region Table

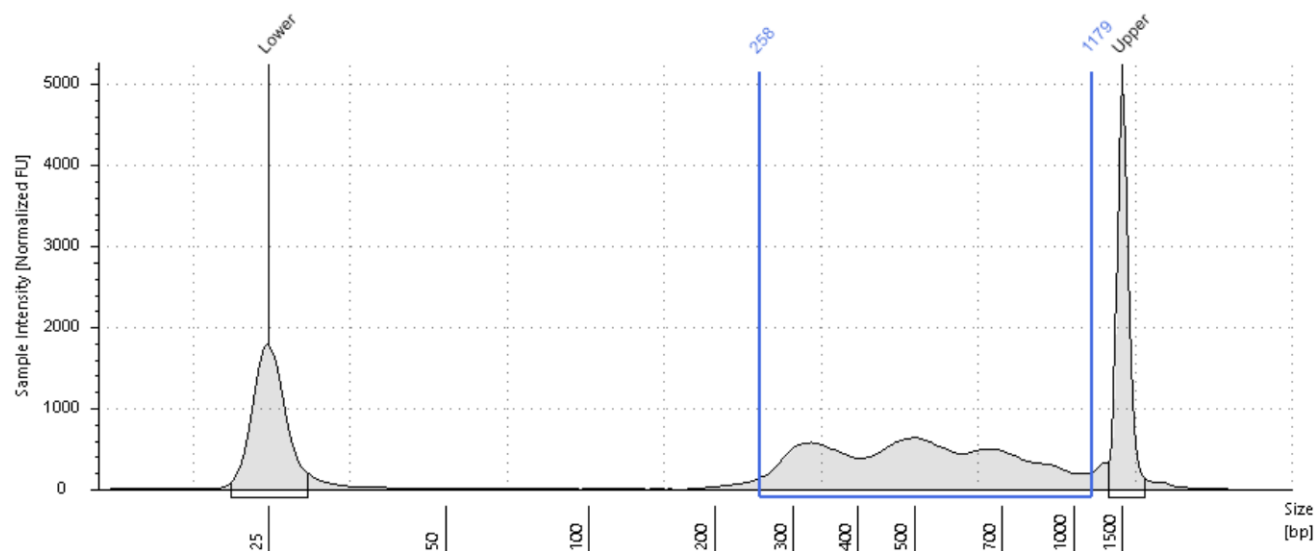
From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
262	1046	556	5.55	17.4	78.38		

H3: LDE13414 - 23**Sample Table**

Well	Conc. [ng/μl]	Sample Description	Alert	Observations
H3	12.8	LDE13414 - 23		

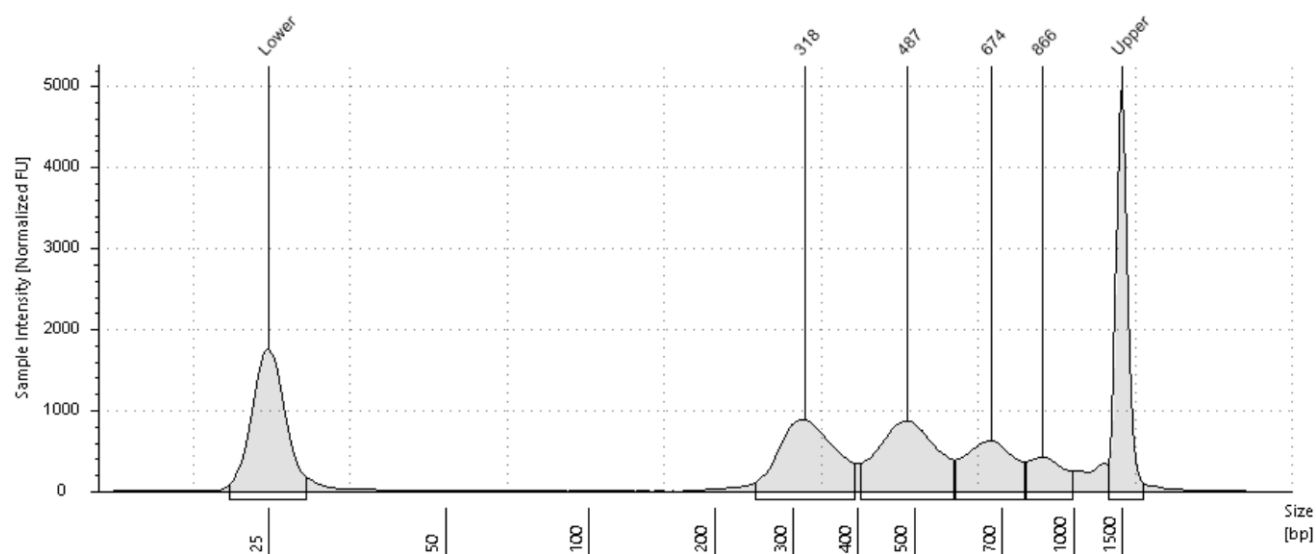
Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.47	-	398	-		Lower Marker
329	4.08	-	19.1	31.99		
504	4.75	-	14.5	37.18		
684	3.93	-	8.86	30.82		
1500	6.50	6.50	6.67	-		Upper Marker

**Region Table**

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
258	1179	541	13.5	43.7	89.21		

A4: LDE13415 - 24

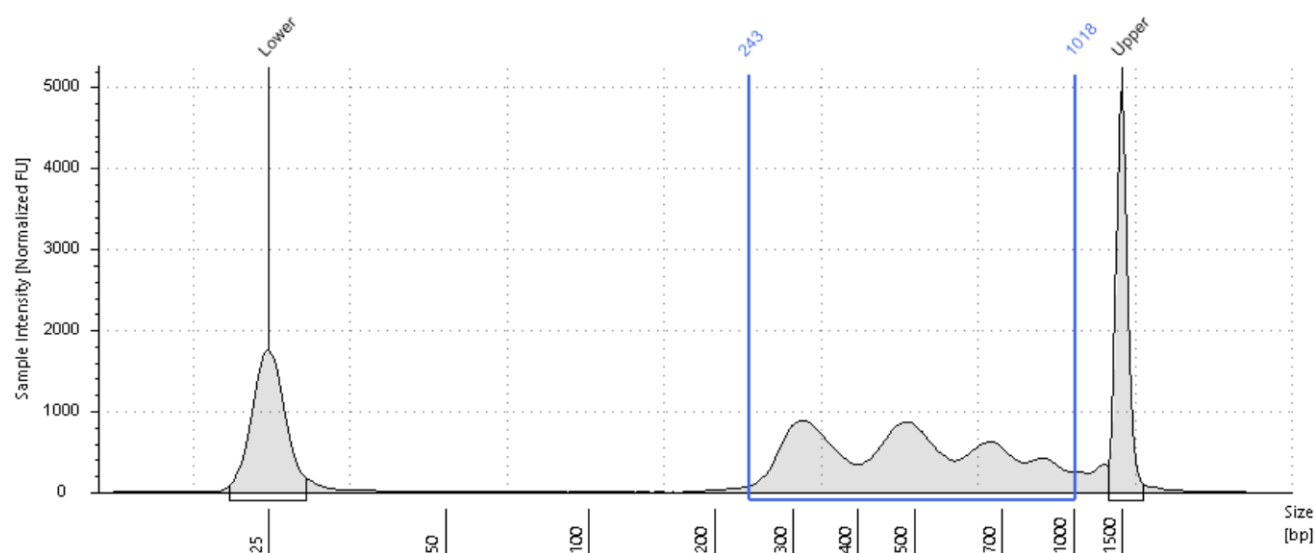


Sample Table

Well	Conc. [ng/μl]	Sample Description	Alert	Observations
A4	16.2	LDE13415 - 24		

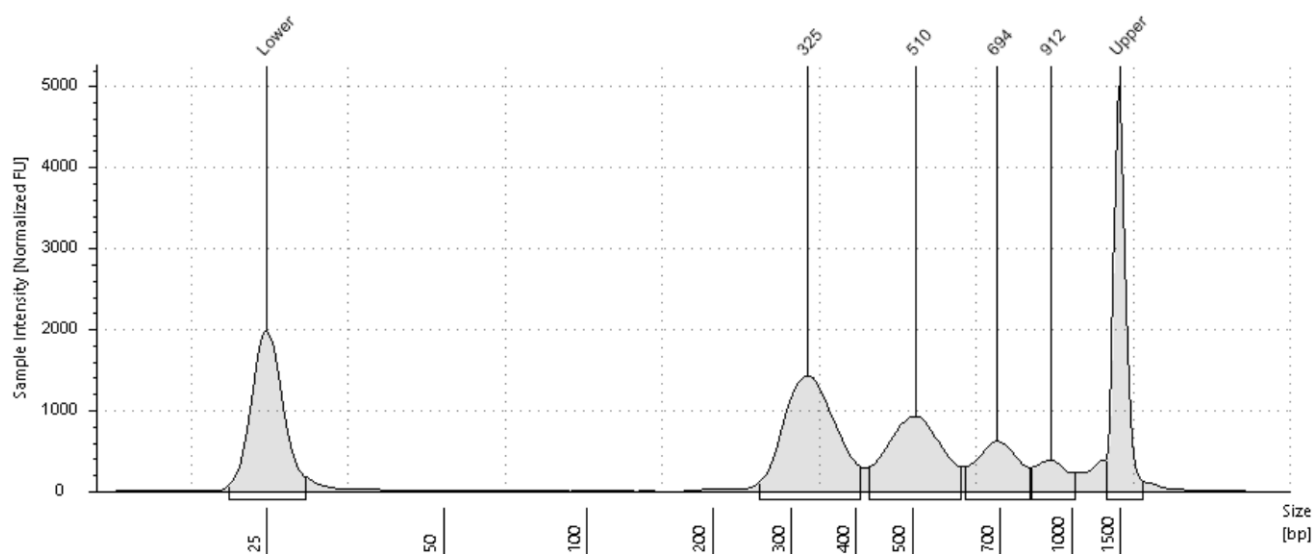
Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.55	-	403	-		Lower Marker
318	5.52	-	26.7	34.12		
487	5.62	-	17.8	34.75		
674	3.38	-	7.72	20.90		
866	1.65	-	2.94	10.22		
1500	6.50	6.50	6.67	-		Upper Marker



Region Table

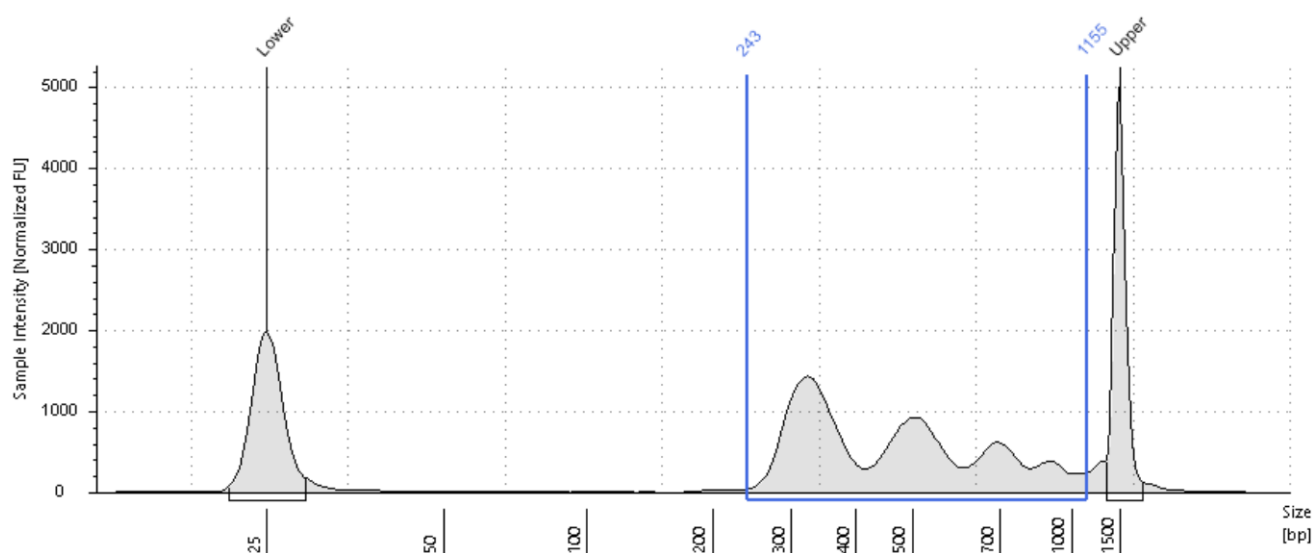
From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
243	1018	515	16.5	56.1	90.78		

B4: LDE13416 - 25**Sample Table**

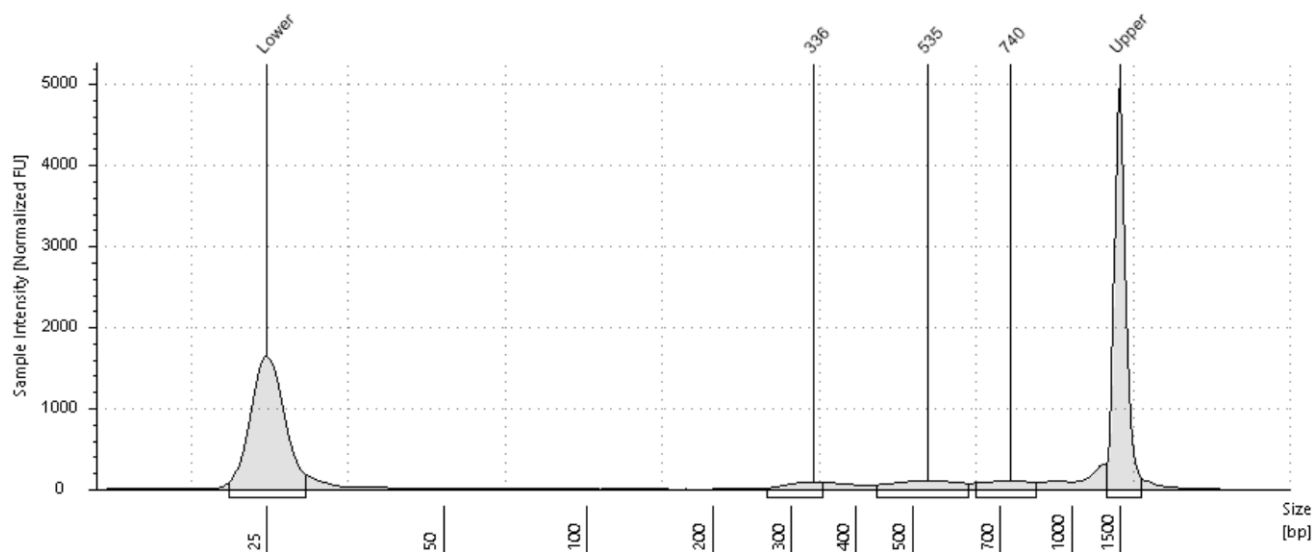
Well	Conc. [ng/μl]	Sample Description	Alert	Observations
B4	17.8	LDE13416 - 25		

Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.90	-	425	-		Lower Marker
325	8.09	-	38.3	45.50		
510	5.50	-	16.6	30.96		
694	2.86	-	6.34	16.08		
912	1.33	-	2.24	7.45		
1500	6.50	6.50	6.67	-		Upper Marker

**Region Table**

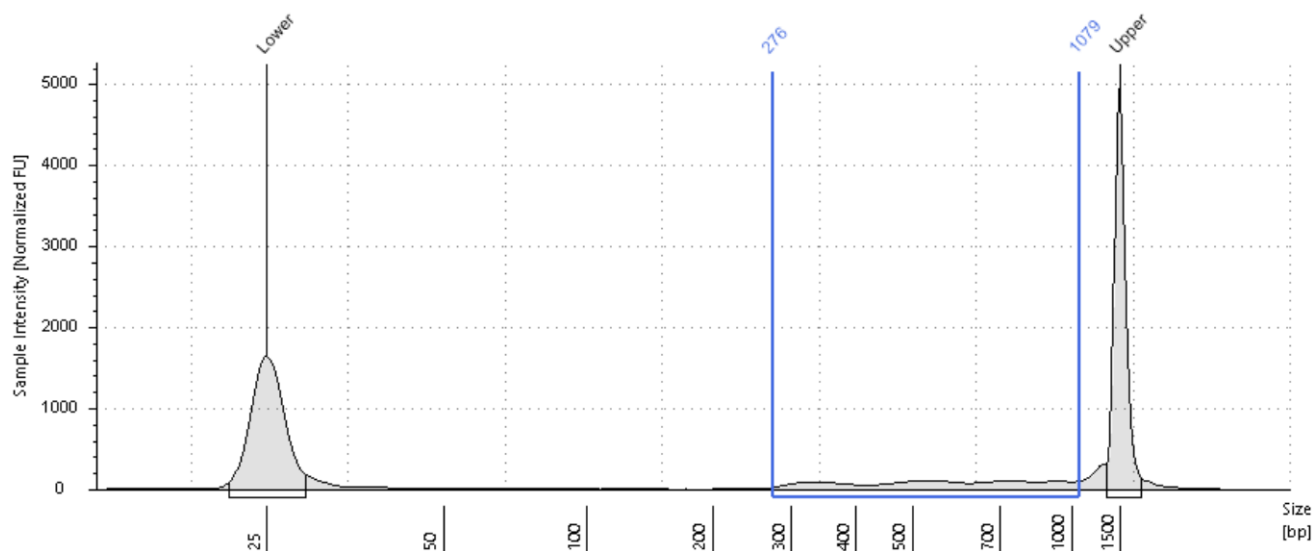
From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
243	1155	499	18.4	64.9	93.19		

C4: LDE13417 - 26**Sample Table**

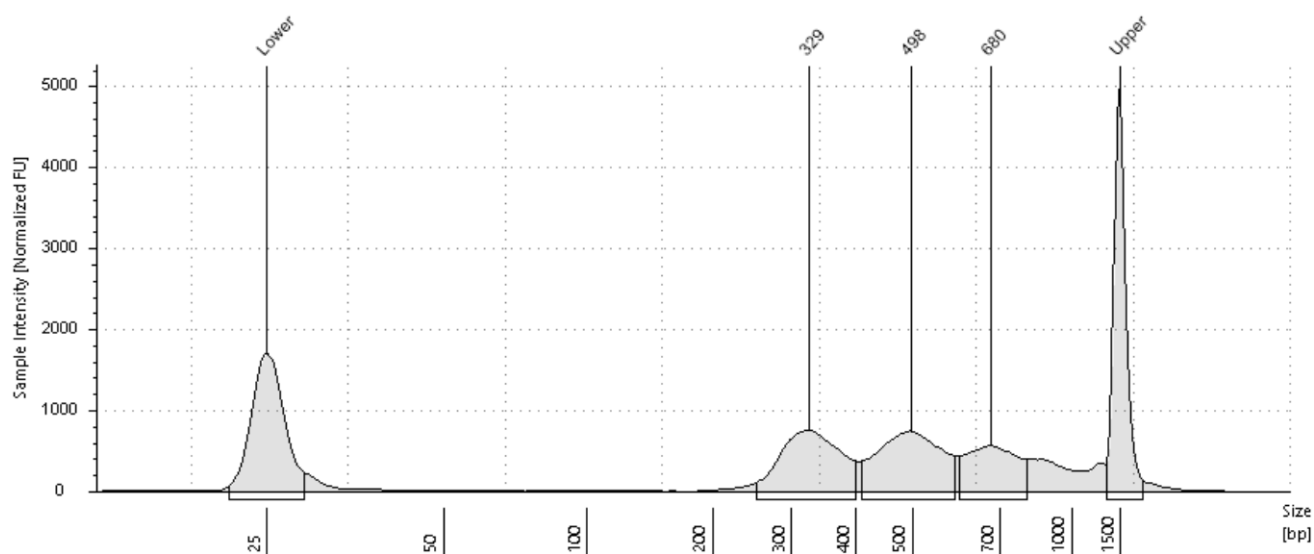
Well	Conc. [ng/μl]	Sample Description	Alert	Observations
C4	1.70	LDE13417 - 26		

Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.42	-	395	-		Lower Marker
336	0.338	-	1.55	19.86		
535	0.799	-	2.30	46.88		
740	0.567	-	1.18	33.26		
1500	6.50	6.50	6.67	-		Upper Marker

**Region Table**

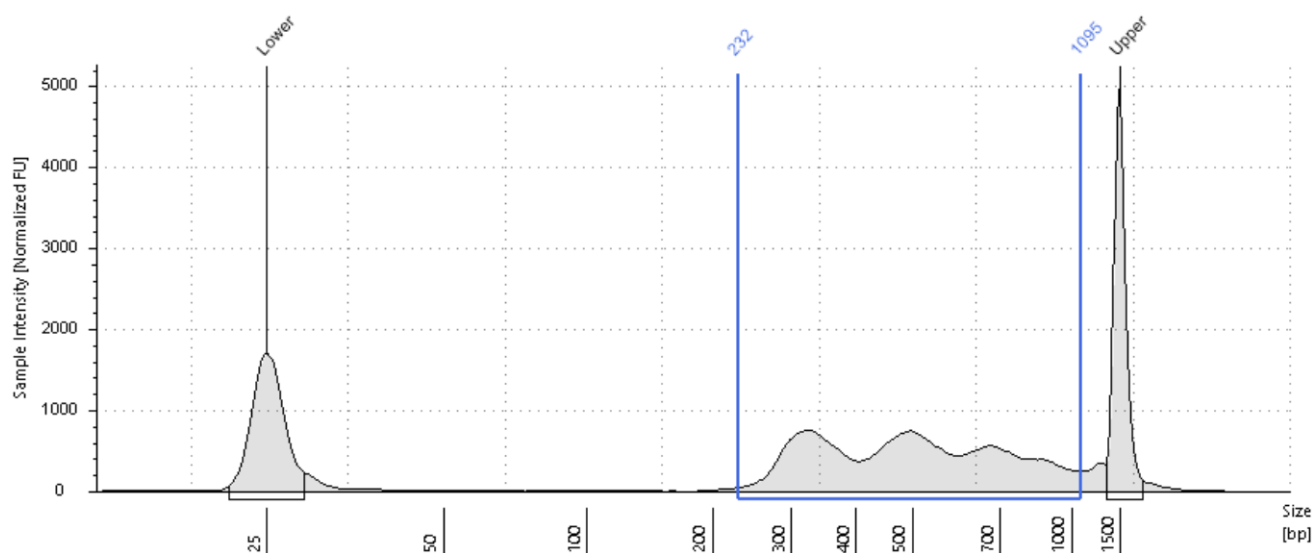
From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
276	1079	600	2.47	7.25	64.53		

D4: LDE13418 - 27**Sample Table**

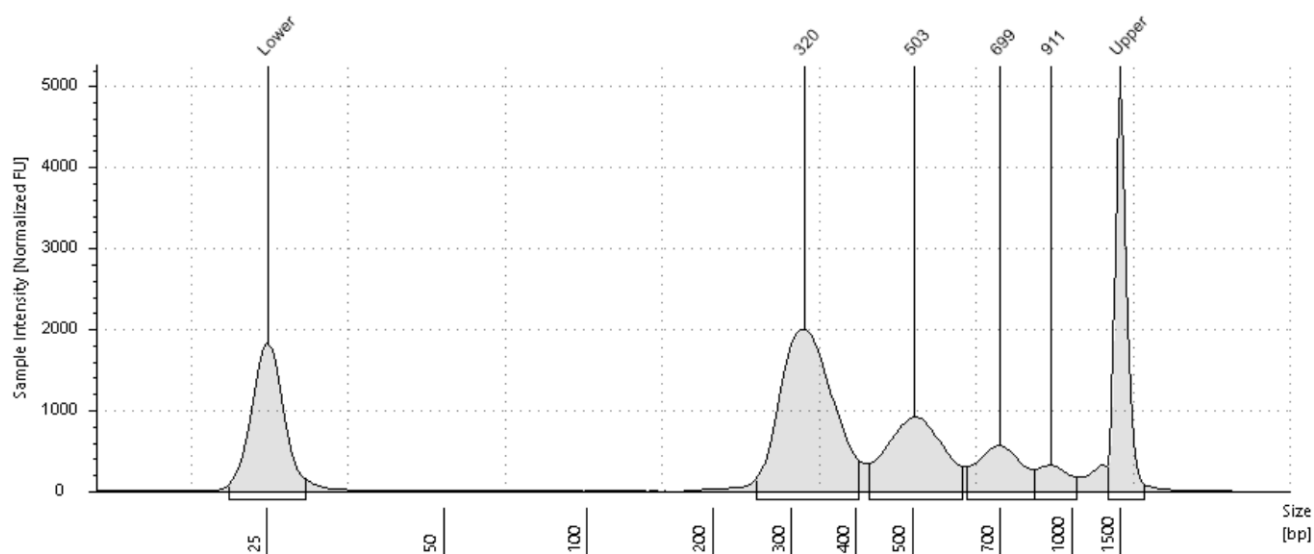
Well	Conc. [ng/μl]	Sample Description	Alert	Observations
D4	13.3	LDE13418 - 27		

Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.13	-	377	-		Lower Marker
329	4.88	-	22.8	36.79		
498	5.16	-	15.9	38.91		
680	3.22	-	7.30	24.31		
1500	6.50	6.50	6.67	-		Upper Marker

**Region Table**

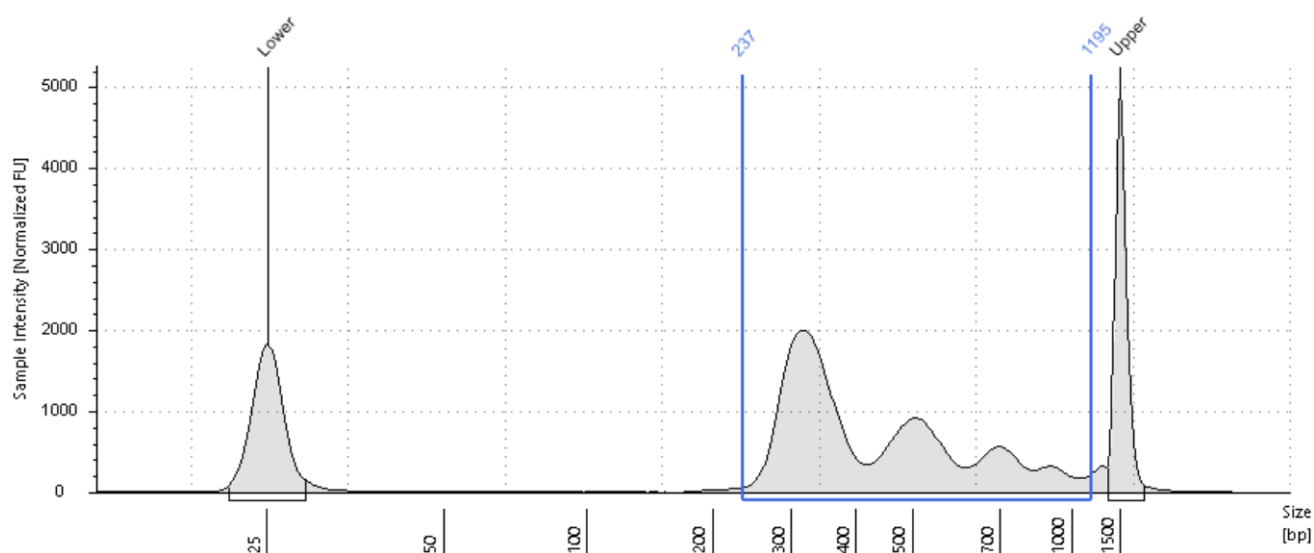
From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
232	1095	531	15.3	50.6	90.60		

E4: LDE13419 - 28**Sample Table**

Well	Conc. [ng/μl]	Sample Description	Alert	Observations
E4	21.2	LDE13419 - 28		

Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	Peak Molarity [nmol/l]	% Integrated Area	Peak Comment	Observations
25	6.47	-	398	-		Lower Marker
320	11.7	-	56.1	55.11		
503	5.64	-	17.2	26.68		
699	2.73	-	6.01	12.92		
911	1.12	-	1.89	5.30		
1500	6.50	6.50	6.67	-		Upper Marker

**Region Table**

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
237	1195	464	21.9	82.9	95.50		



GENEWIZ NGS Laboratory

Library QC Report

Name: Jia Li

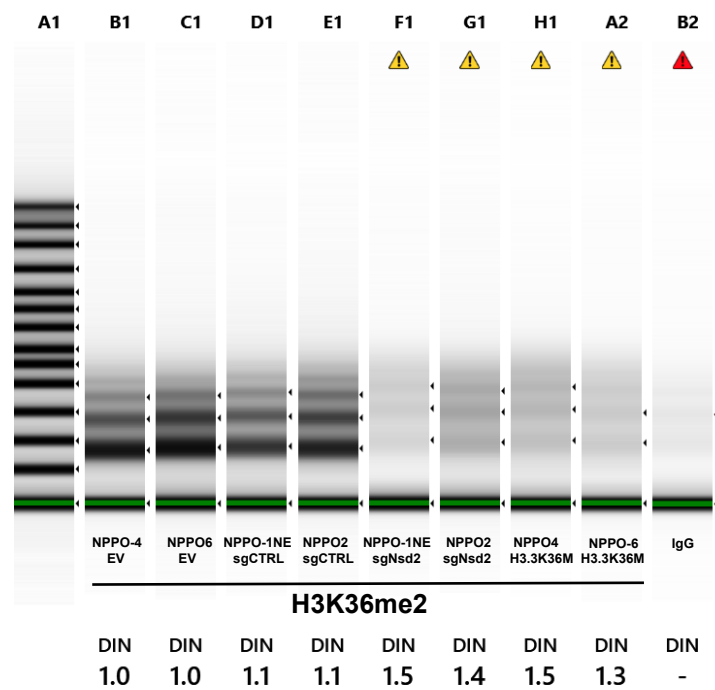
Institution: Columbia University

Quotation Number.: 30-528672863

Sample #	Sample Name	GENEWIZ ID	Library QC					
			TapeStation Data				Qubit Data	
			Dilution factor	Average library size (bp)	Nucleic acid conc.(ng/μl)	Nucleic acid conc.(nM)	Nucleic acid conc.(ng/μl)	Nucleic acid conc.(nM)
1	1	LDE13392	1	456.00	2.78	10.70	3.95	13.12
2	2	LDE13393	1	505.00	4.45	15.60	6.23	18.69
3	3	LDE13394	1	526.00	17.50	57.90	21.80	62.80
4	4	LDE13395	1	477.00	18.20	65.00	21.30	67.66
5	5	LDE13396	1	548.00	7.57	24.00	10.10	27.93
6	6	LDE13397	1	515.00	19.50	66.00	21.30	62.67
7	7	LDE13398	1	444.00	21.80	83.70	26.20	89.41
8	8	LDE13399	1	558.00	3.24	10.10	5.05	13.71
9	9	LDE13400	1	557.00	5.43	16.90	6.46	17.57
10	10	LDE13401	1	517.00	16.80	55.50	16.80	49.24
11	11	LDE13402	1	464.00	18.60	68.00	21.90	71.51
12	12	LDE13403	1	633.00	6.80	18.80	8.51	20.37
13	13	LDE13404	1	534.00	9.60	30.90	12.10	34.33
14	14	LDE13405	1	460.00	19.00	70.80	22.80	75.10
15	15	LDE13406	1	493.00	3.62	12.50	4.23	13.00
16	16	LDE13407	1	464.00	8.62	31.50	10.40	33.96
17	17	LDE13408	1	452.00	15.60	58.60	19.10	64.03
18	18	LDE13409	1	472.00	17.40	63.10	18.20	58.42
19	19	LDE13410	1	524.00	6.87	22.70	7.31	21.14
20	20	LDE13411	1	470.00	13.00	47.10	14.10	45.45
21	21	LDE13412	1	384.00	12.60	54.00	14.30	56.42
22	22	LDE13413	1	556.00	5.55	17.40	6.60	17.99
23	23	LDE13414	1	541.00	13.50	43.70	12.80	35.85
24	24	LDE13415	1	515.00	16.50	56.10	16.60	48.84
25	25	LDE13416	1	499.00	18.40	64.90	15.90	48.28
26	26	LDE13417	1	600.00	2.47	7.25	3.25	8.21
27	27	LDE13418	1	531.00	15.30	50.60	15.30	43.66
28	28	LDE13419	1	464.00	21.90	82.90	22.80	74.45

Related to Extended Data Figure 5f,g,h,i (Batch2)

Filename: LibraryQC_1-9_30-1128425165.cgDNA

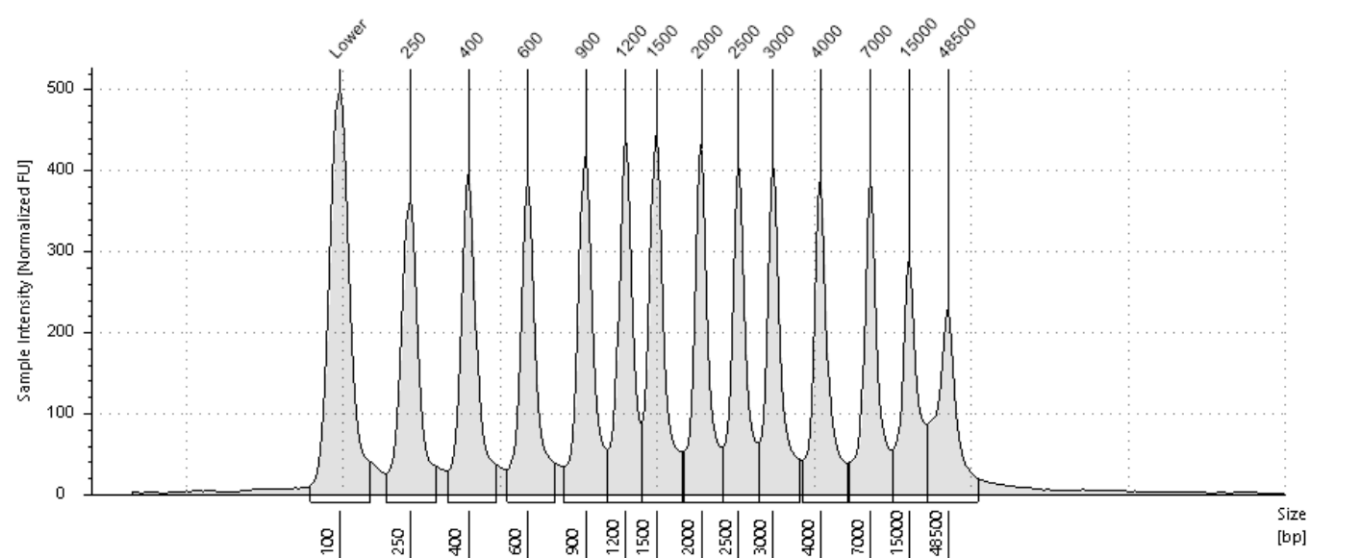


Default image (Contrast 100%)

Sample Info

Well	DIN	Conc. [ng/ul]	Sample Description
A1	-	65.9	Ladder
B1	1.0	19.5	LGM38582
C1	1.0	21.1	LGM38583
D1	1.1	15.8	LGM38584
E1	1.1	20.2	LGM38585
F1	1.5	4.77	LGM38586
G1	1.4	9.39	LGM38587
H1	1.5	7.88	LGM38588
A2	1.3	5.92	LGM38589
B2	-	2.44	LGM38590

A1: Ladder



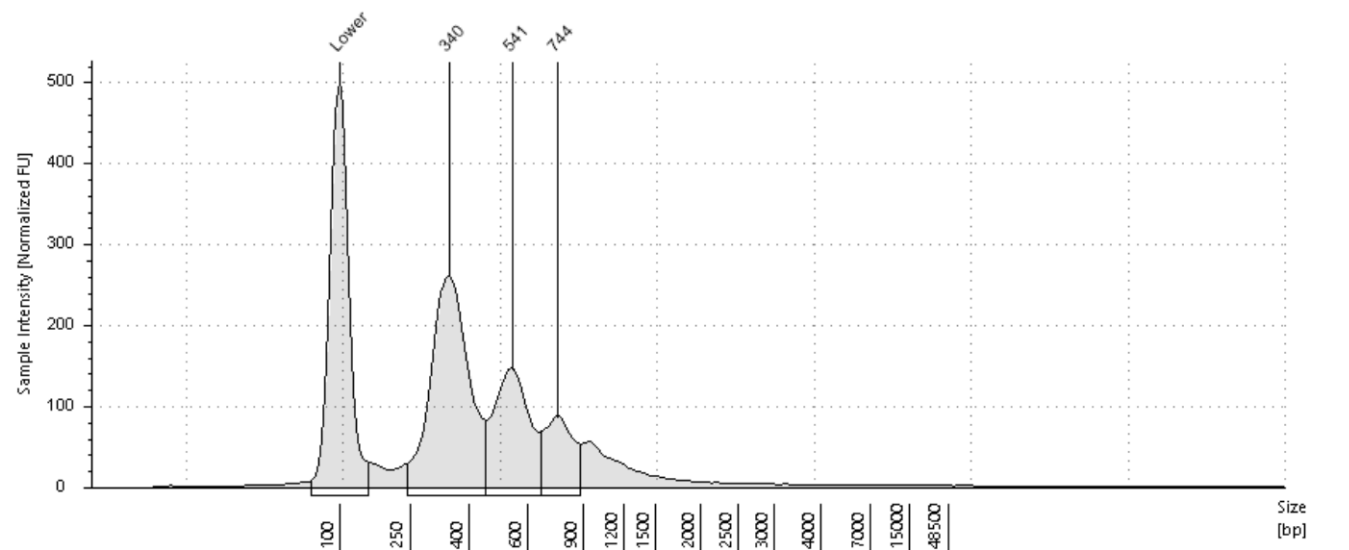
Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
A1	-	65.9	Ladder

Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	147		Lower Marker
250	5.22	-	8.19	182	308		
400	5.31	-	8.33	338	481		
600	5.13	-	8.05	521	725		
900	5.35	-	8.40	772	1054		
1200	5.35	-	8.40	1054	1354		
1500	5.57	-	8.74	1354	1768		
2000	5.21	-	8.17	1783	2279		
2500	4.86	-	7.62	2279	2785		
3000	4.92	-	7.72	2785	3532		
4000	4.67	-	7.32	3587	5407		
7000	4.60	-	7.22	5485	10781		
15000	3.76	-	5.91	10781	21408		
48500	3.77	-	5.92	21408	74183		

B1: LGM38582

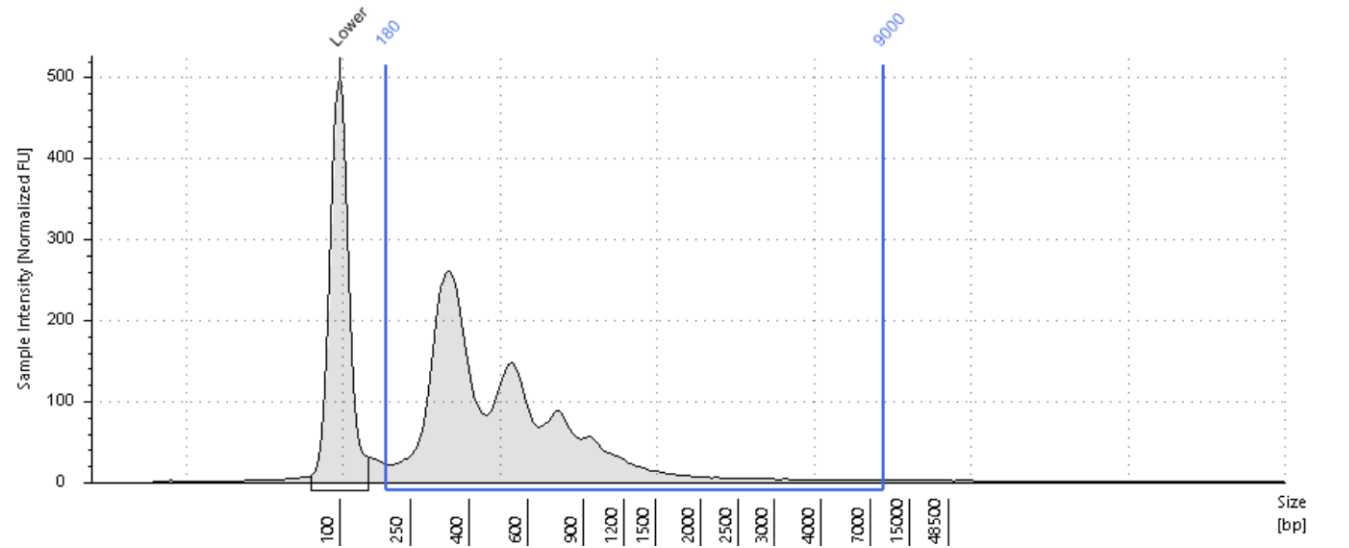


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
B1	1.0	19.5	LGM38582

Peak Table

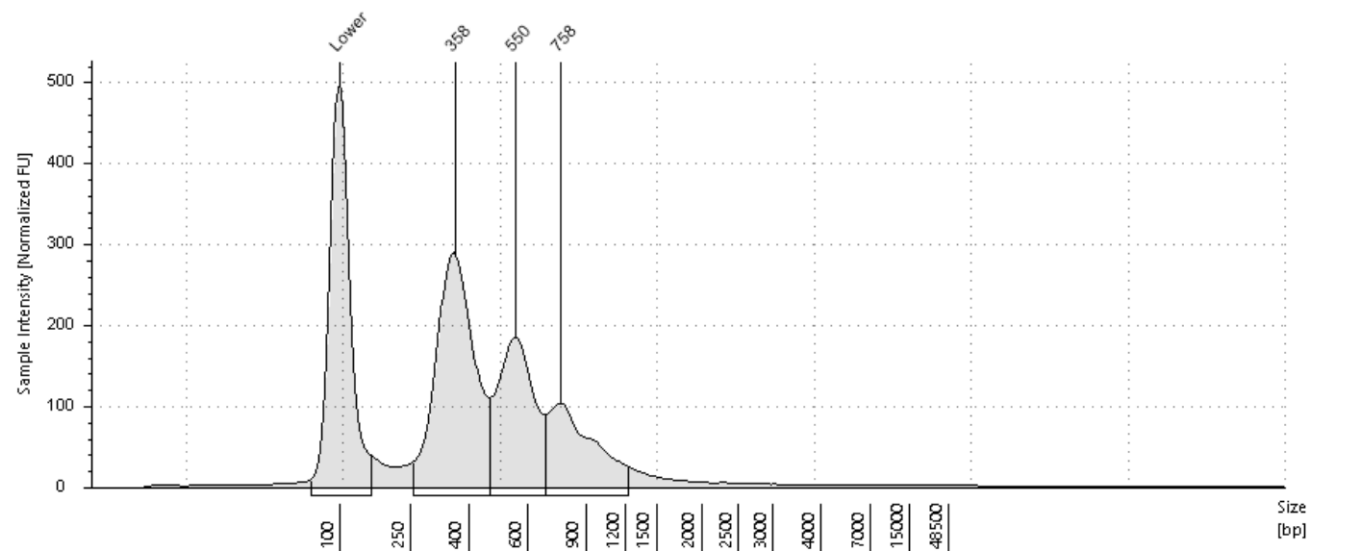
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	144		Lower Marker
340	9.03	-	56.03	238	449		
541	4.75	-	29.48	449	660		
744	2.33	-	14.49	660	879		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
180	9000	630	18.9	65.3	96.85		

C1: LGM38583

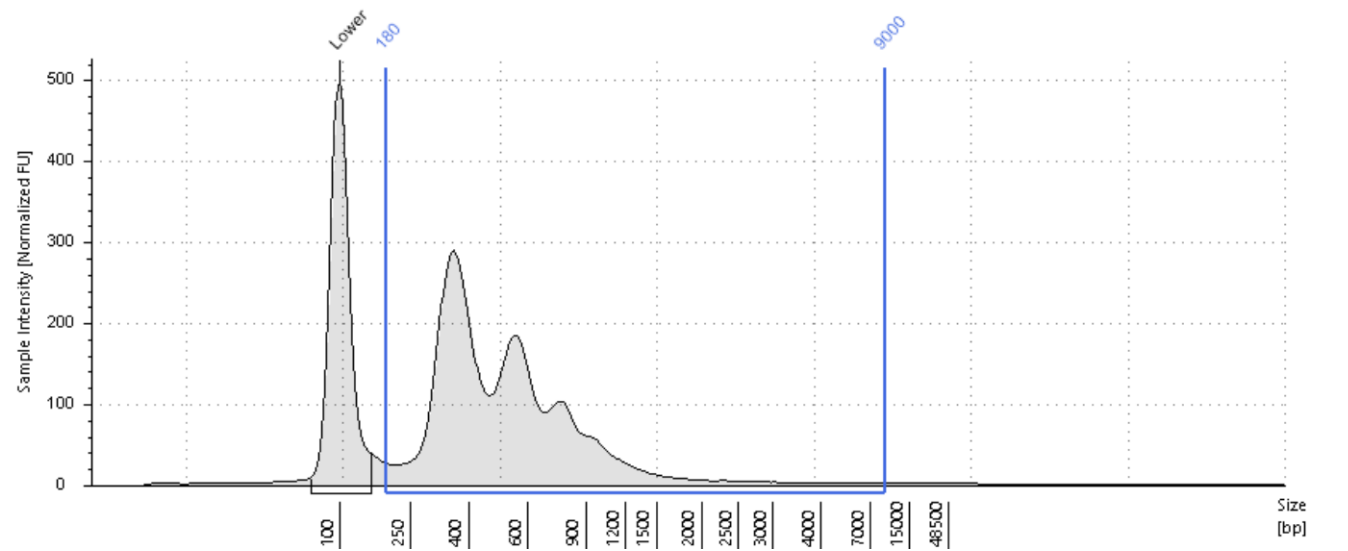


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
C1	1.0	21.1	LGM38583

Peak Table

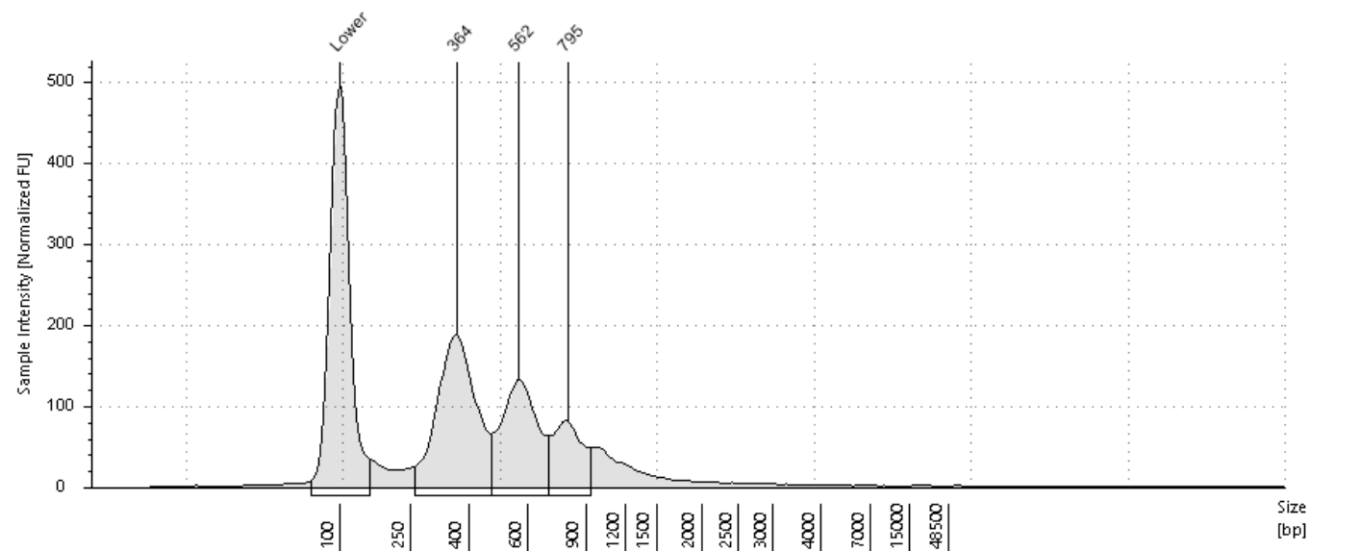
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	151		Lower Marker
358	9.39	-	48.99	254	462		
550	5.80	-	30.29	462	681		
758	3.97	-	20.71	681	1229		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
180	9000	620	20.4	68.4	96.67		

D1: LGM38584

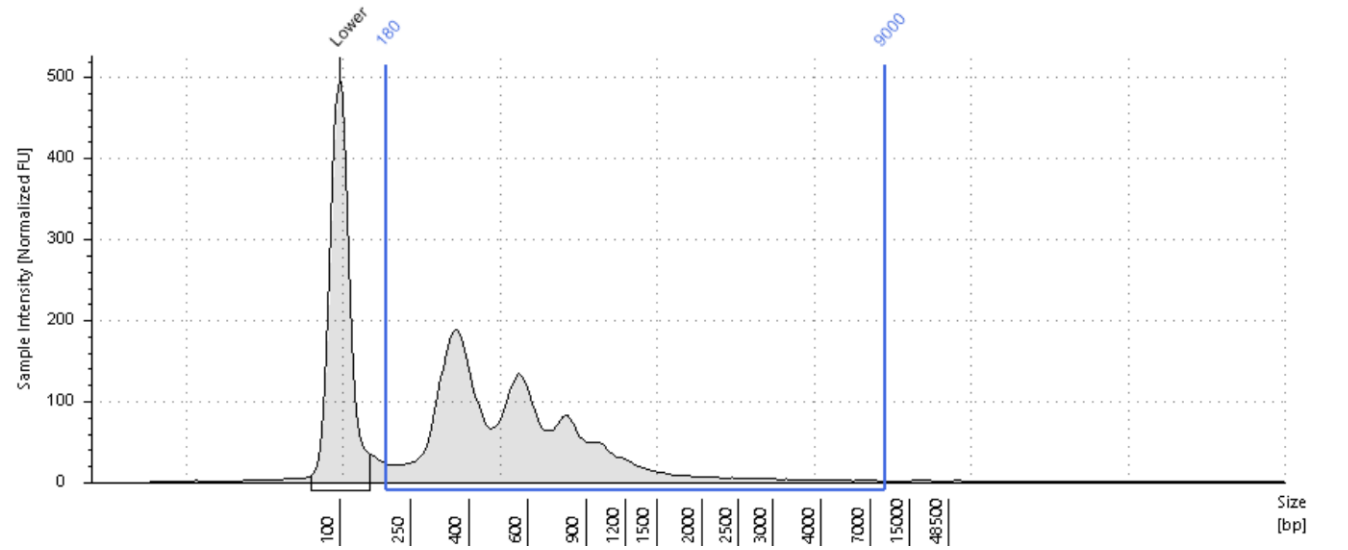


Sample Table

Well	DIN	Conc. [ng/ul]	Sample Description
D1	1.1	15.8	LGM38584

Peak Table

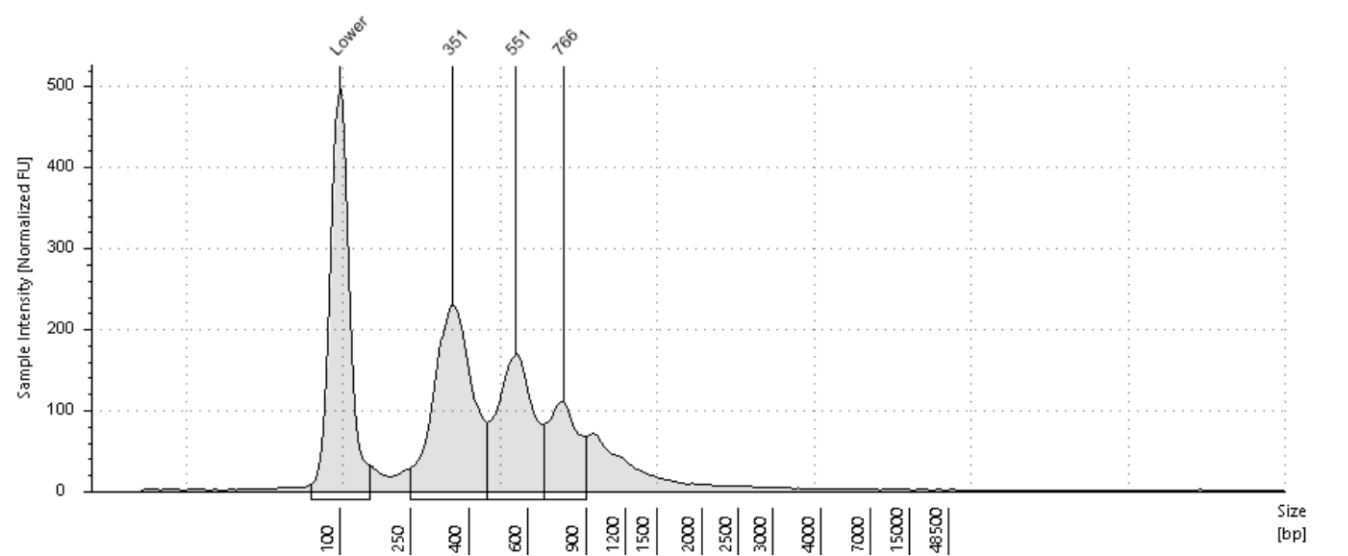
Size [bp]	Calibrated Conc. [ng/ul]	Assigned Conc. [ng/ul]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	146		Lower Marker
364	6.39	-	50.04	259	468		
562	4.20	-	32.92	468	695		
795	2.18	-	17.05	695	934		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/ul]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
180	9000	674	15.2	49.1	96.38		

E1: LGM38585

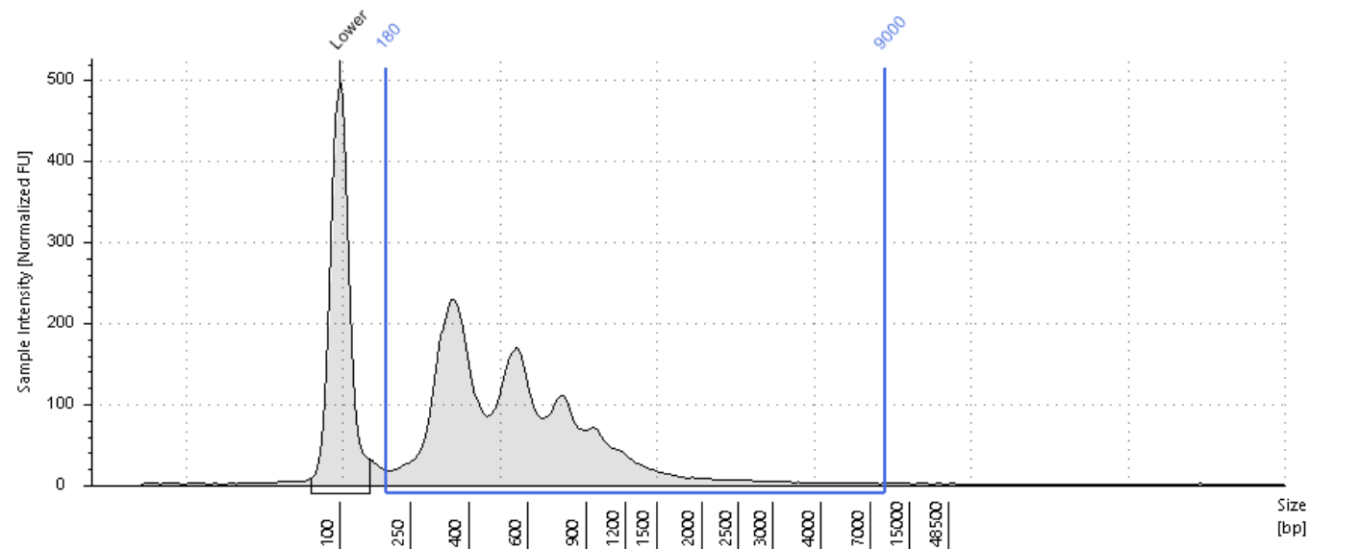


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
E1	1.1	20.2	LGM38585

Peak Table

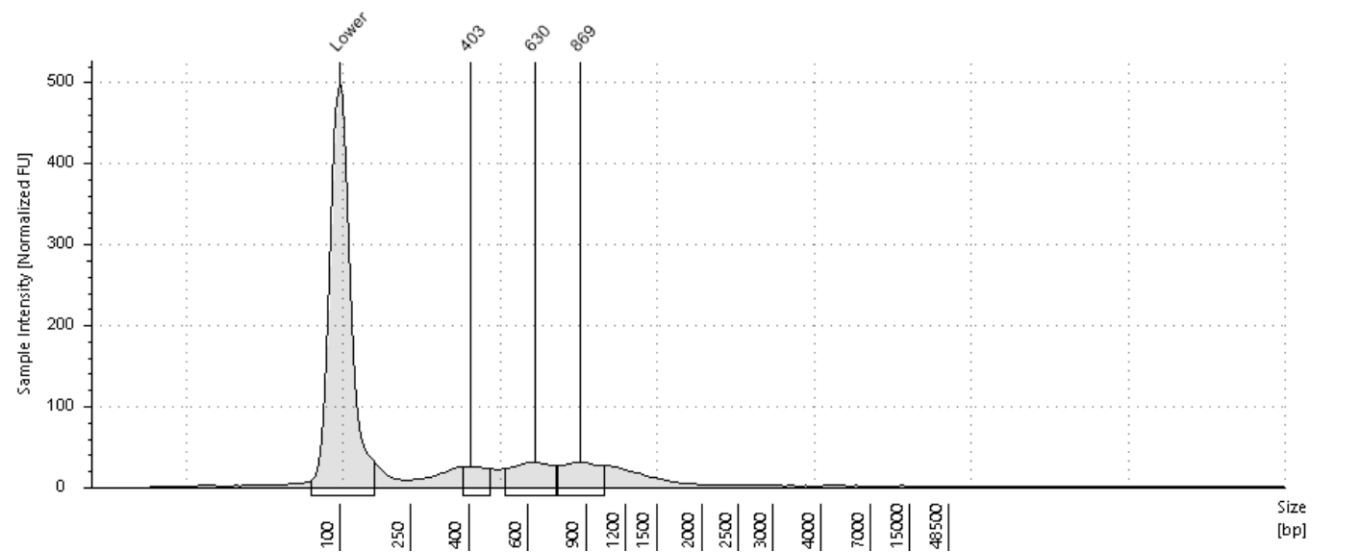
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	146		Lower Marker
351	7.96	-	48.43	249	454		
551	5.44	-	33.07	454	670		
766	3.04	-	18.50	670	900		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
180	9000	678	19.7	63.4	97.39		

F1: LGM38586

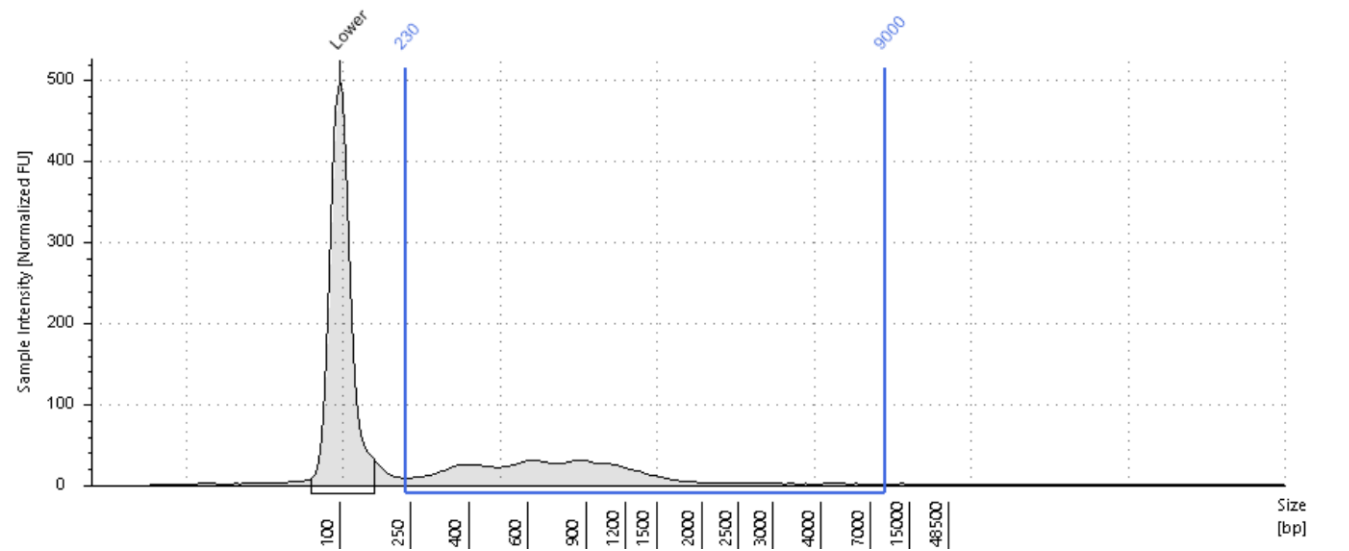


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
F1	1.5	4.77	LGM38586

Peak Table

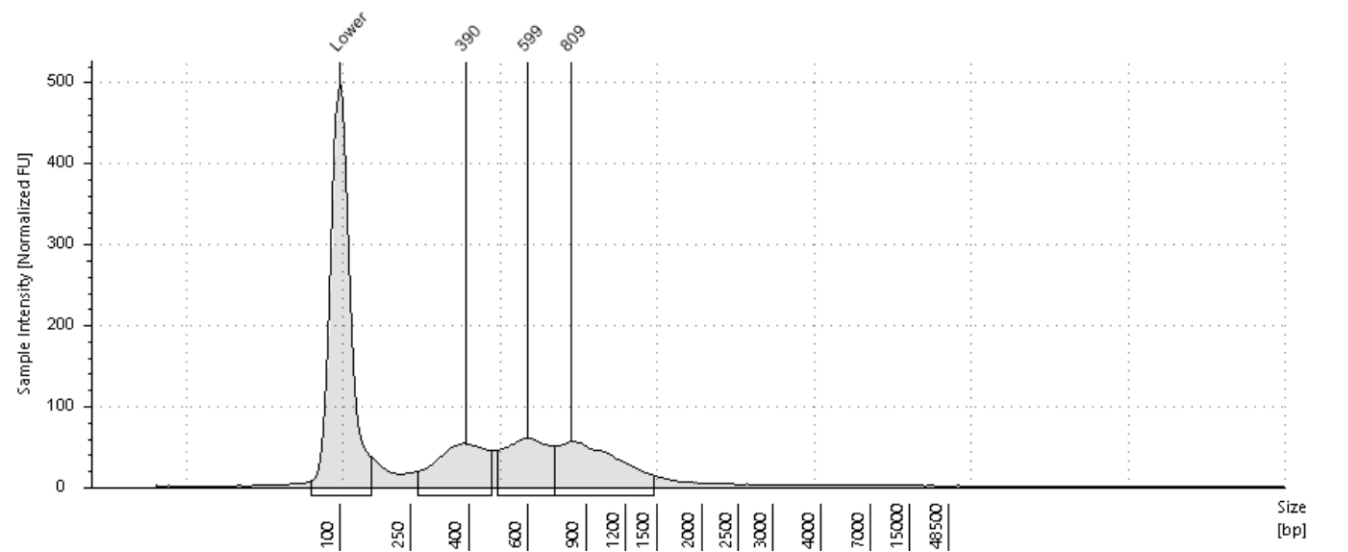
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	156		Lower Marker
403	0.480	-	19.61	384	464		
630	1.03	-	42.03	511	733		
869	0.939	-	38.36	740	1024		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
230	9000	925	4.26	11.3	89.33		<div></div>

G1: LGM38587

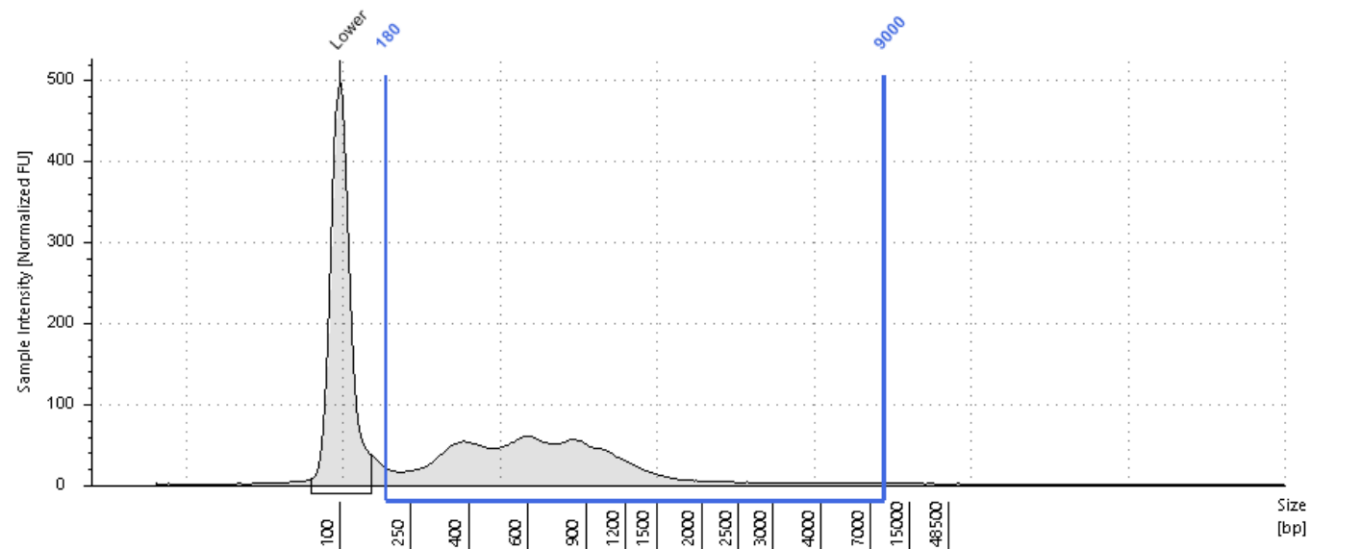


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
G1	1.4	9.39	LGM38587

Peak Table

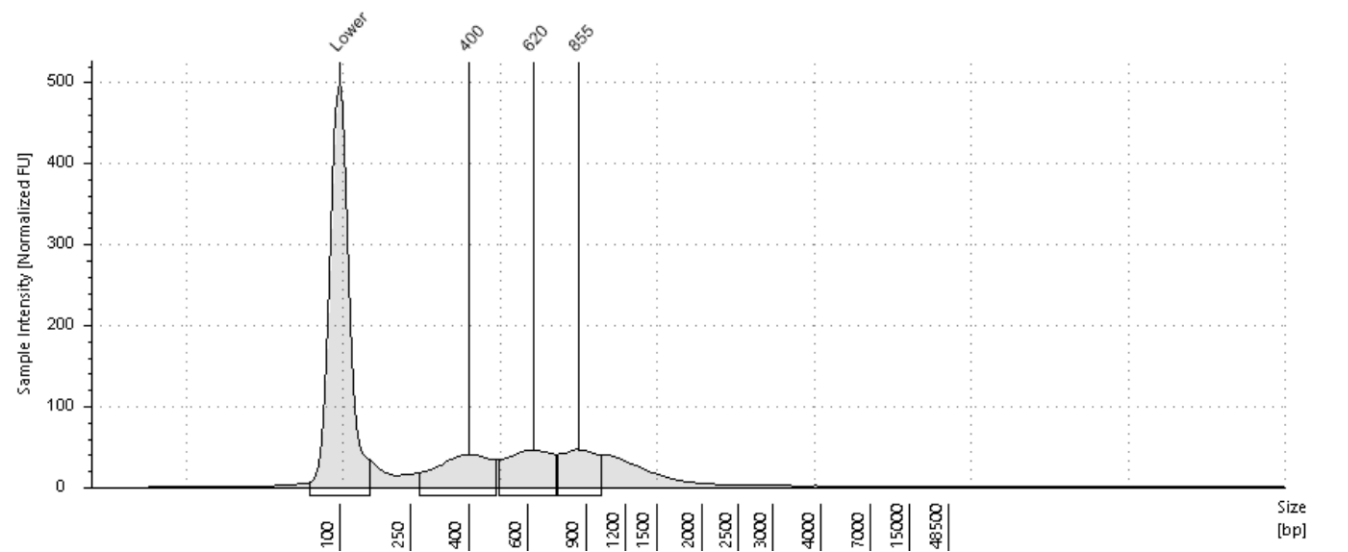
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	69	151		Lower Marker
390	2.37	-	30.60	264	469		
599	2.42	-	31.16	486	728		
809	2.96	-	38.23	728	1475		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
180	9000	822	8.80	25.4	93.71		

H1: LGM38588

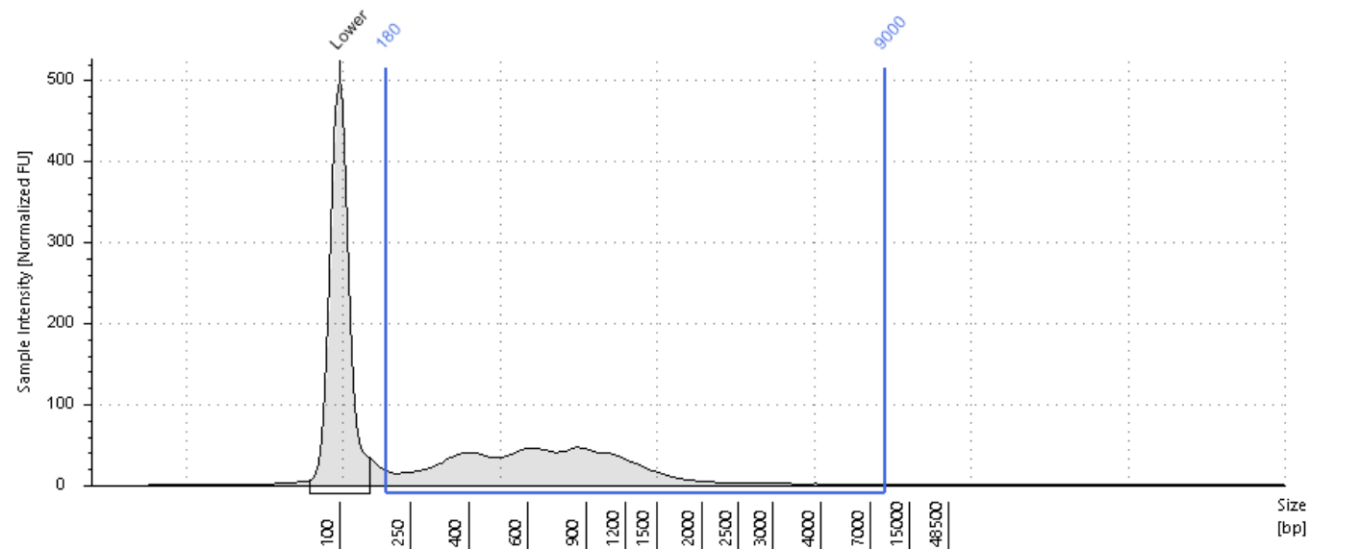


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
H1	1.5	7.88	LGM38588

Peak Table

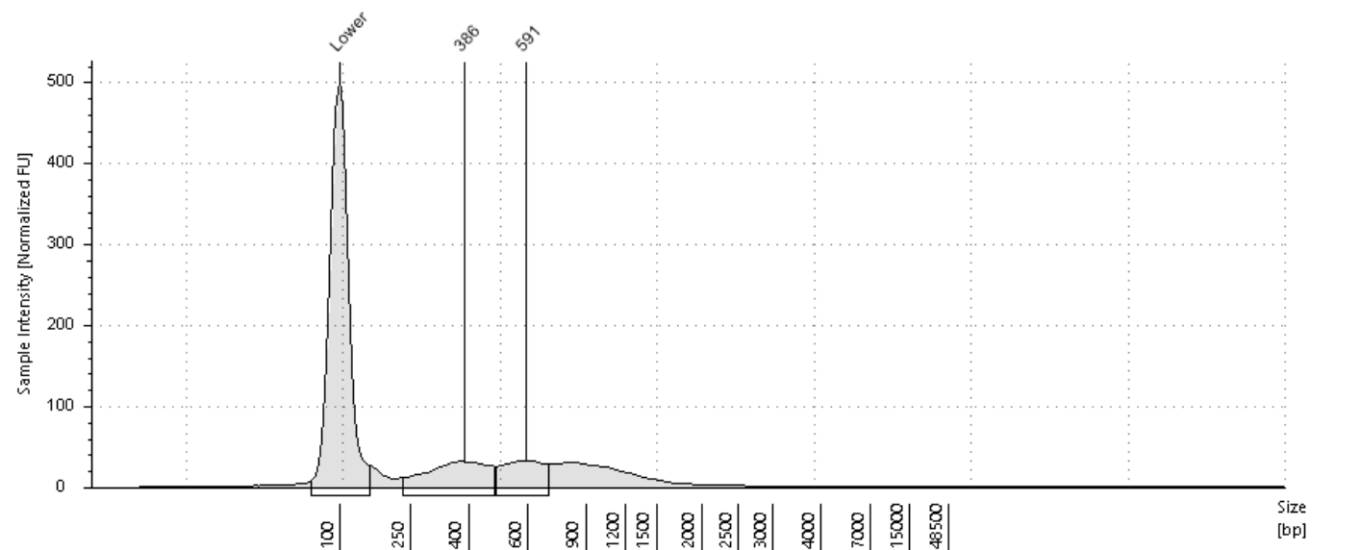
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	67	146		Lower Marker
400	1.90	-	36.21	267	481		
620	1.83	-	34.85	494	728		
855	1.52	-	28.95	734	1007		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
180	9000	835	7.46	20.8	94.64		<div></div>

A2: LGM38589

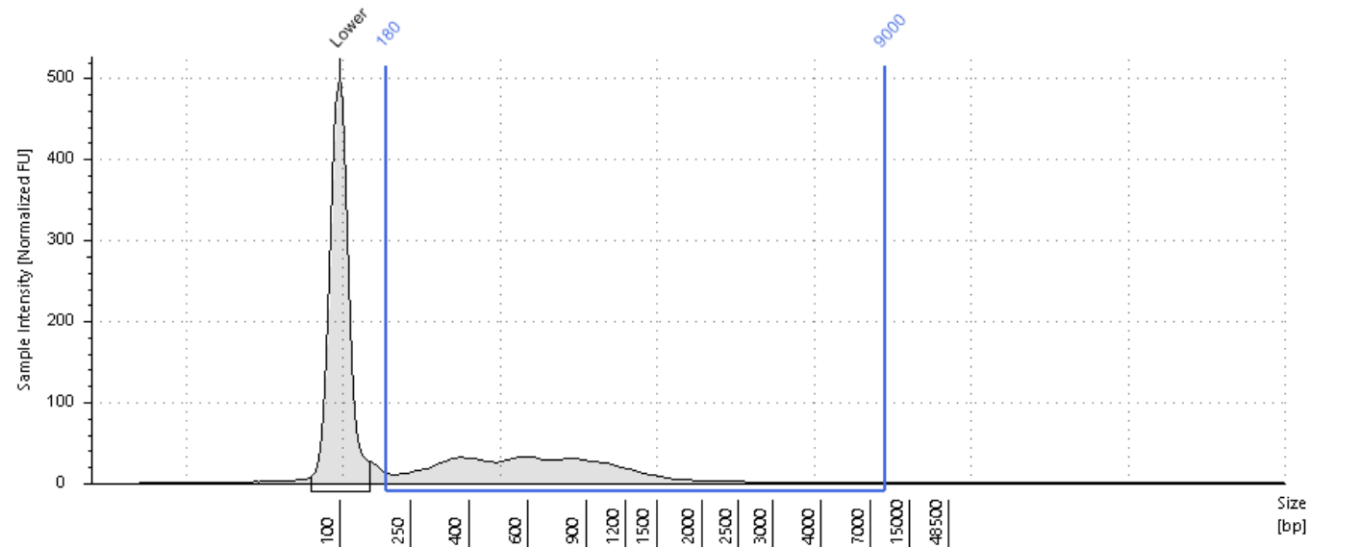


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
A2	1.3	5.92	LGM38589

Peak Table

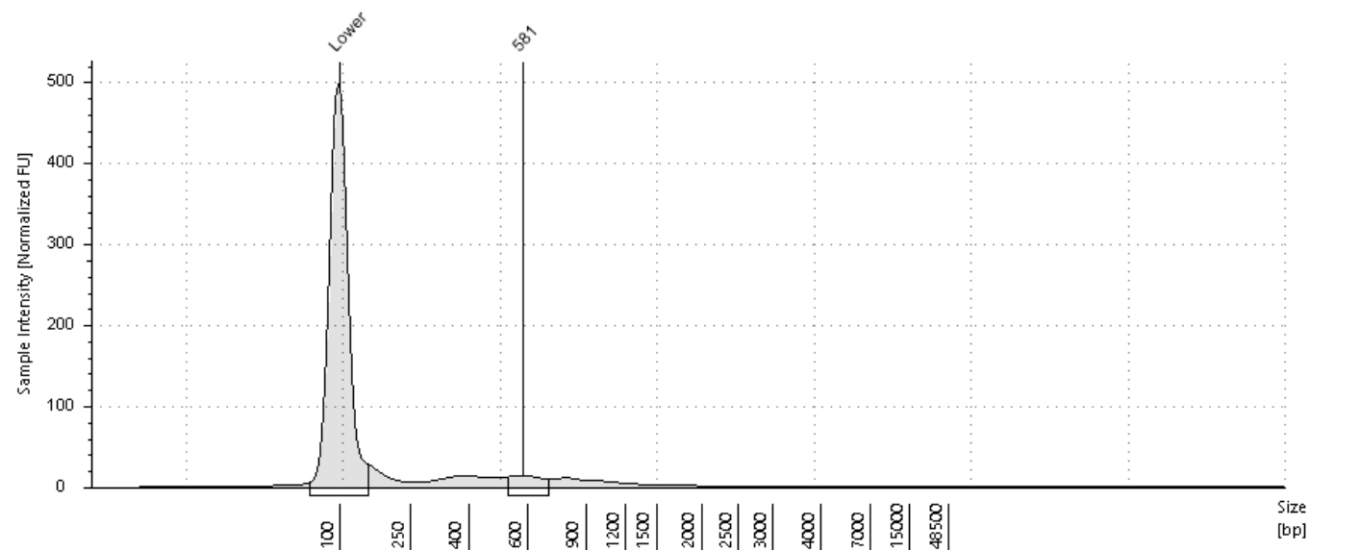
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	146		Lower Marker
386	1.71	-	57.59	225	475		
591	1.26	-	42.41	483	694		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
180	9000	810	5.36	15.9	90.55		

B2: LGM38590

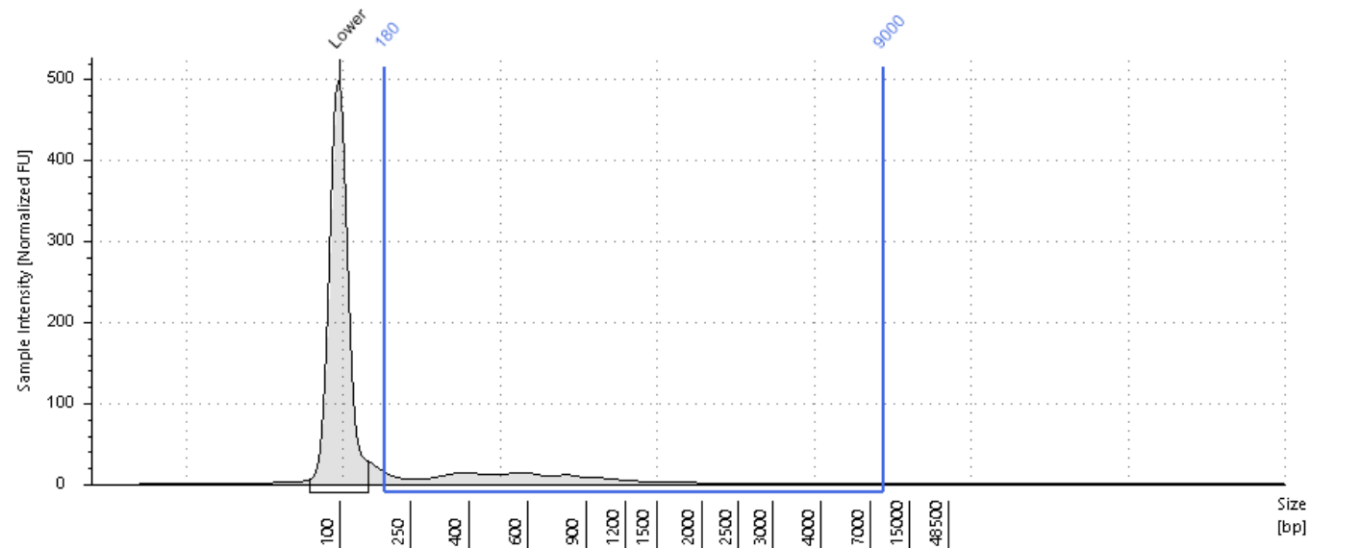


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
B2	-	2.44	LGM38590

Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	146		Lower Marker
581	0.408	-	100.00	528	701		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
180	9000	868	2.06	7.10	84.47		



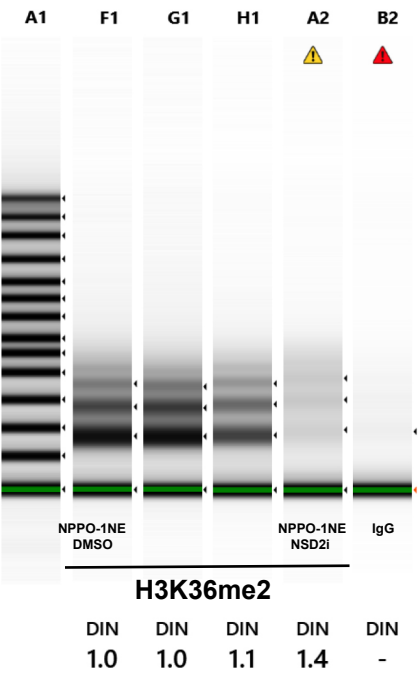
Azenta NGS Laboratory Library QC Report

Name: Jia Li
Institution: Columbia University
Quotation Number: 30-1128425165

Sample #	Sample Name	AZENTA ID	Library QC					
			TapeStation Data				Qubit Data	
			Dilution factor	Average library size (bp)	Nucleic acid conc.(ng/μl)	Nucleic acid conc.(nM)	Nucleic acid conc.(ng/μl)	Nucleic acid conc.(nM)
1	1	LGM38582	1.00	630.00	18.90	65.30	20.00	48.10
2	2	LGM38583	1.00	620.00	20.40	68.40	19.60	47.90
3	3	LGM38584	1.00	674.00	15.20	49.10	13.00	29.22
4	4	LGM38585	1.00	678.00	19.70	63.40	16.60	37.10
5	5	LGM38586	1.00	925.00	4.26	11.30	4.46	7.31
6	6	LGM38587	1.00	822.00	8.80	25.40	7.96	14.67
7	7	LGM38588	1.00	835.00	7.46	20.80	6.63	12.03
8	8	LGM38589	1.00	810.00	5.36	15.90	4.40	8.23
9	9	LGM38590	1.00	868.00	2.06	7.10	1.14	1.99

Related to Extended Data Figure 5j,h

Filename: LibraryQC_1-9_30-1130063907.cgDNA

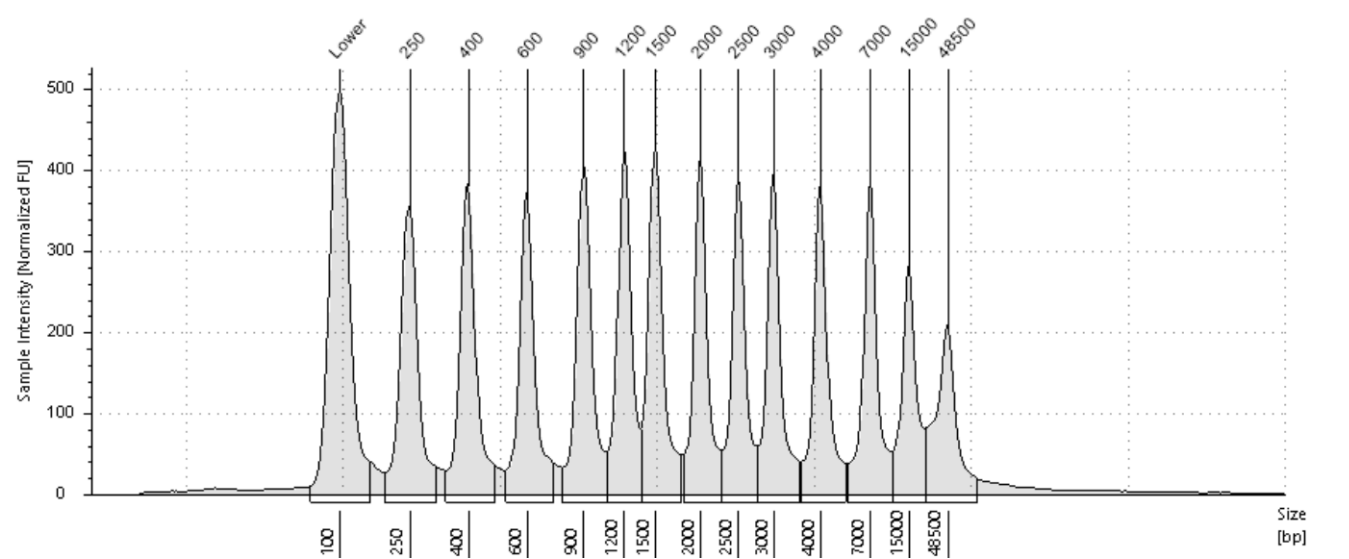


Default image (Contrast 100%)

Sample Info

Well	DIN	Conc. [ng/ul]	Sample Description
A1	-	64.5	Ladder
F1	1.2	10.5	LGM38606
G1	1.3	10.6	LGM38607
H1	1.3	8.63	LGM38608
A2	1.4	6.06	LGM38609
B2	-	1.76	LGM38610

A1: Ladder



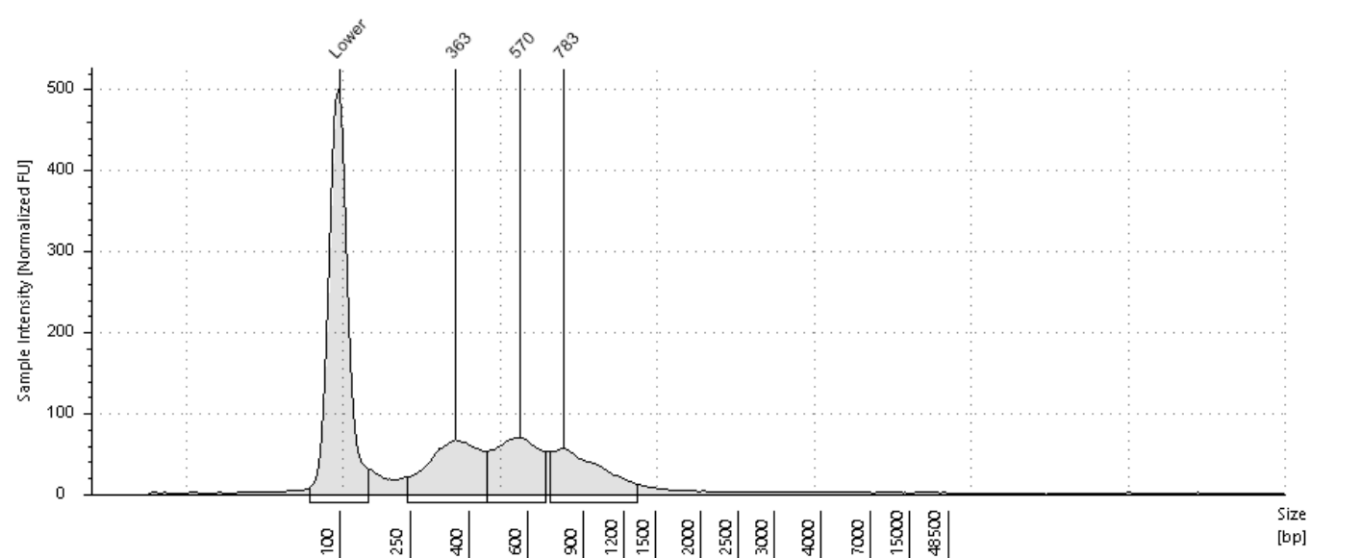
Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
A1	-	64.5	Ladder

Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	149		Lower Marker
250	5.21	-	8.39	179	307		
400	5.24	-	8.43	333	477		
600	4.98	-	8.02	517	721		
900	5.24	-	8.43	769	1058		
1200	5.17	-	8.31	1058	1354		
1500	5.39	-	8.67	1354	1760		
2000	4.97	-	7.99	1788	2262		
2500	4.66	-	7.49	2262	2757		
3000	4.85	-	7.81	2757	3505		
4000	4.60	-	7.41	3532	5292		
7000	4.63	-	7.45	5450	10897		
15000	3.60	-	5.79	10897	20649		
48500	3.62	-	5.82	20649	74183		

F1: LGM38606

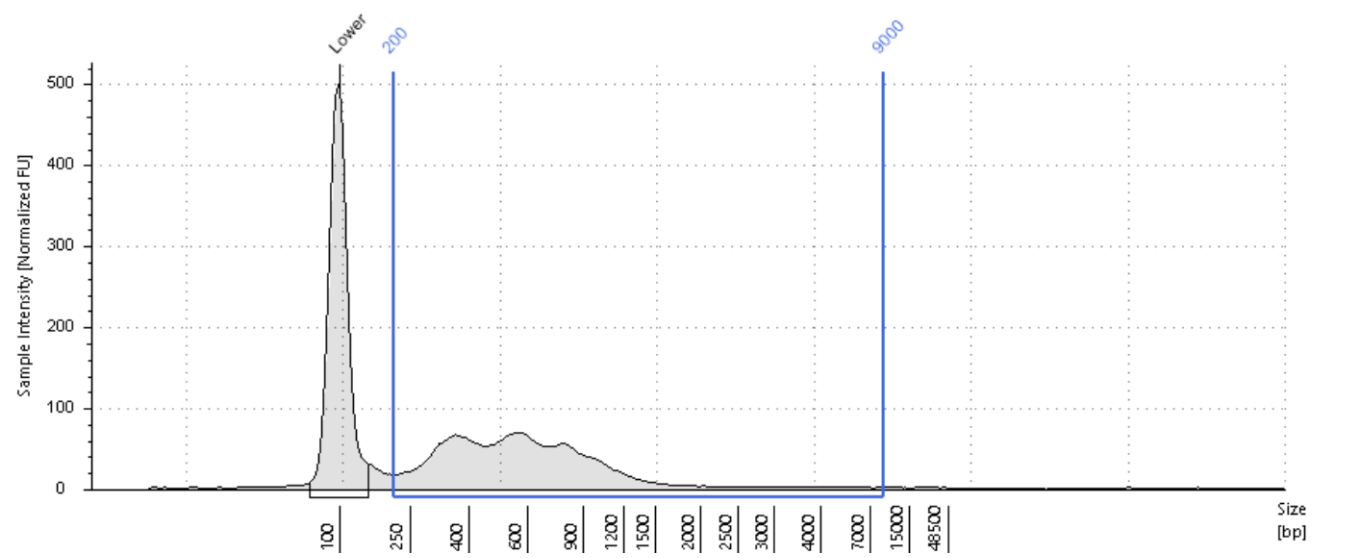


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
F1	1.2	10.5	LGM38606

Peak Table

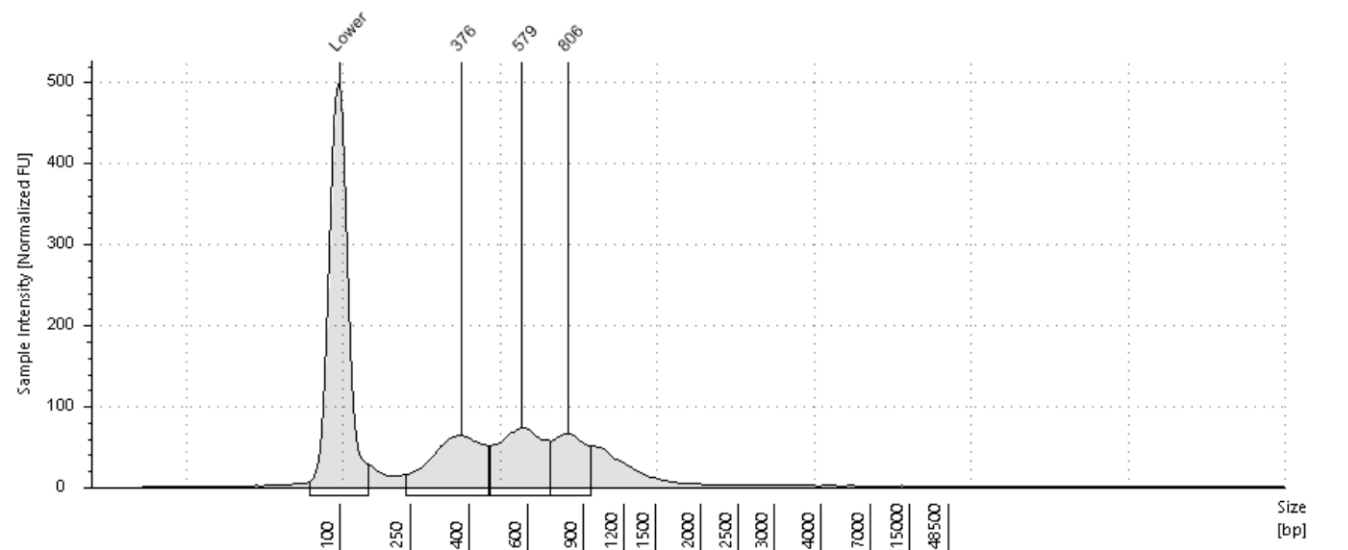
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	146		Lower Marker
363	3.11	-	35.64	245	454		
570	2.88	-	33.02	454	683		
783	2.55	-	29.27	708	1324		
-	-	-	-	-	-		Sample Well



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
200	9000	738	9.45	28.7	89.94		

G1: LGM38607

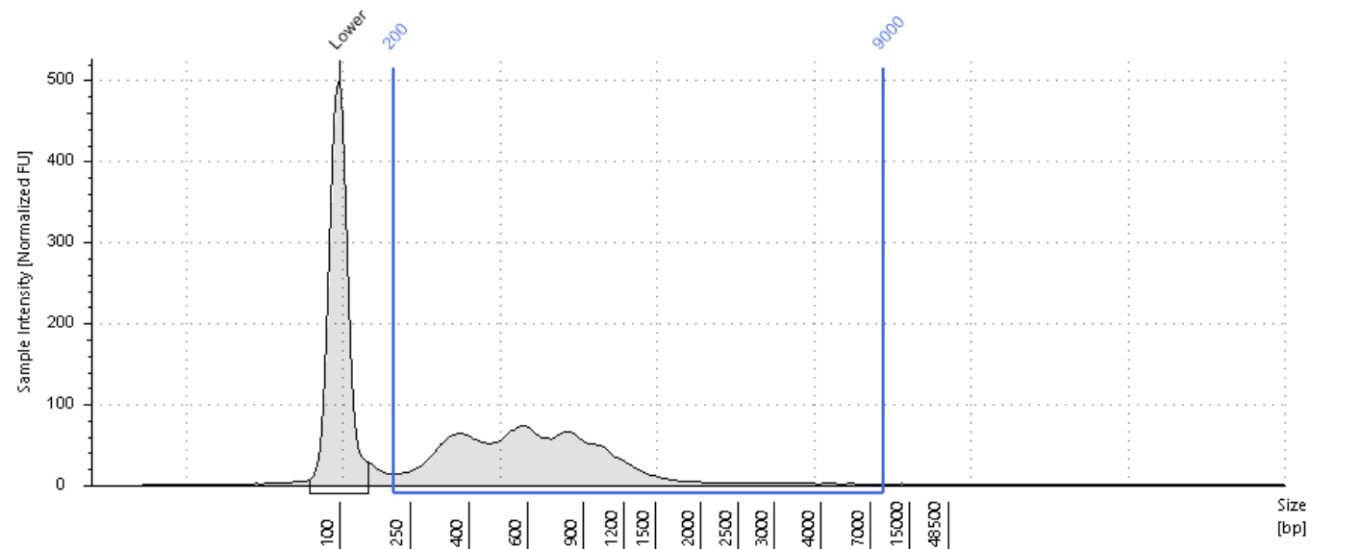


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
G1	1.3	10.6	LGM38607

Peak Table

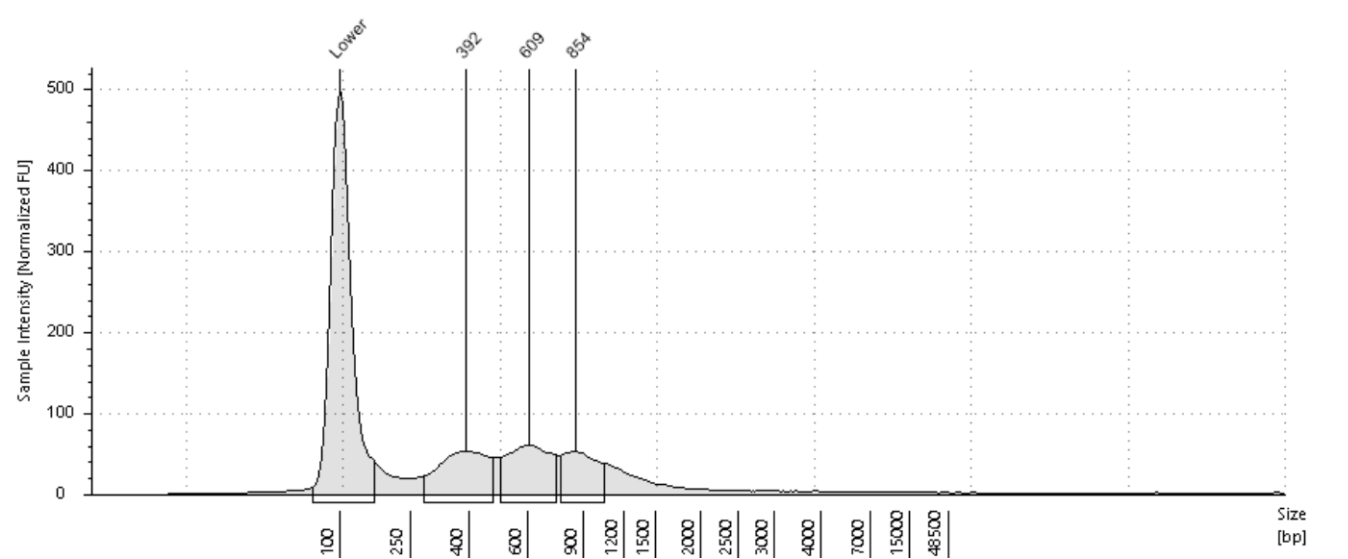
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	144		Lower Marker
376	2.99	-	37.39	238	461		
579	3.02	-	37.84	465	708		
806	1.98	-	24.76	708	950		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
200	9000	766	10.0	28.7	94.18		<div></div>

H1: LGM38608

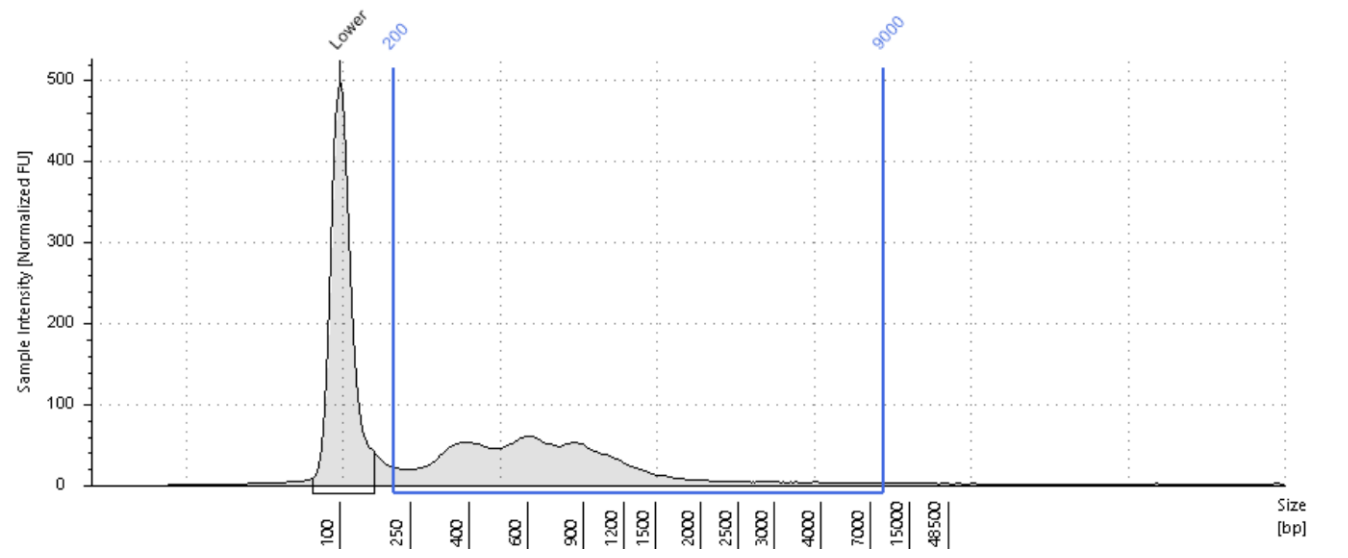


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
H1	1.3	8.63	LGM38608

Peak Table

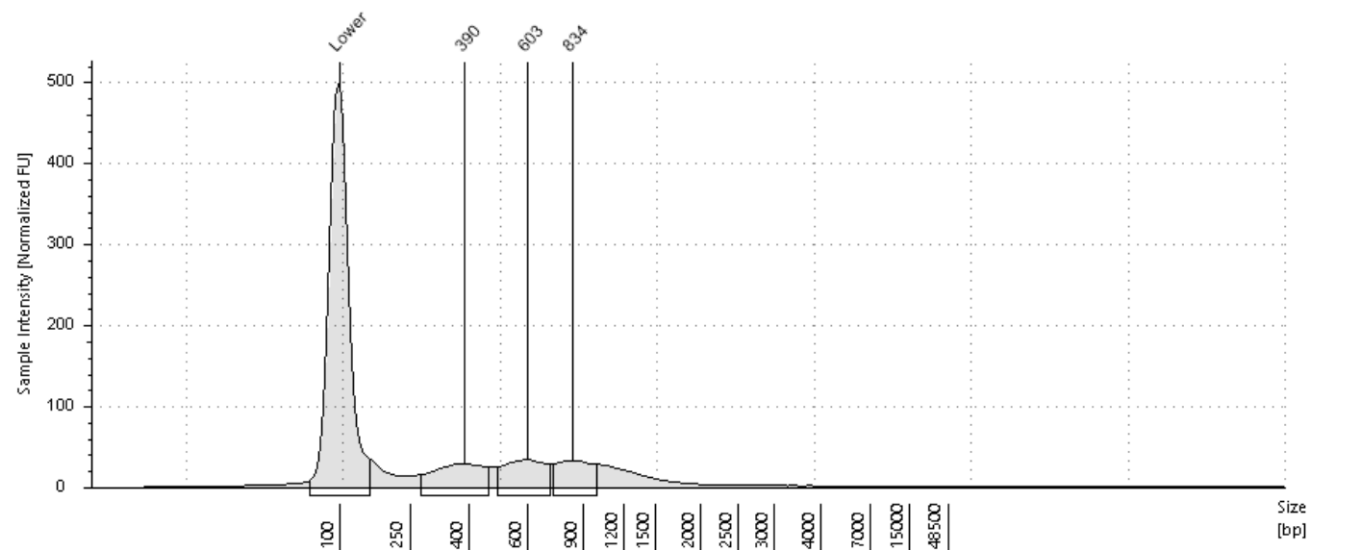
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	70	156		Lower Marker
392	2.14	-	36.62	281	472		
609	2.18	-	37.34	498	738		
854	1.52	-	26.04	758	1040		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
200	9000	865	8.02	23.0	92.92		

A2: LGM38609

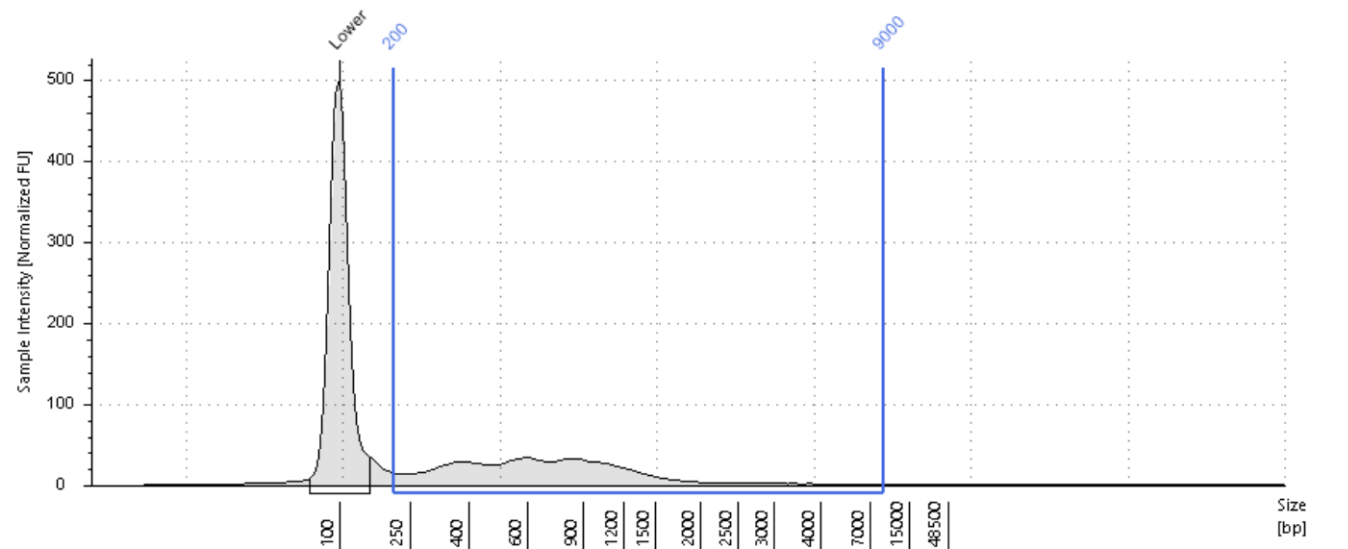


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
A2	1.4	6.06	LGM38609

Peak Table

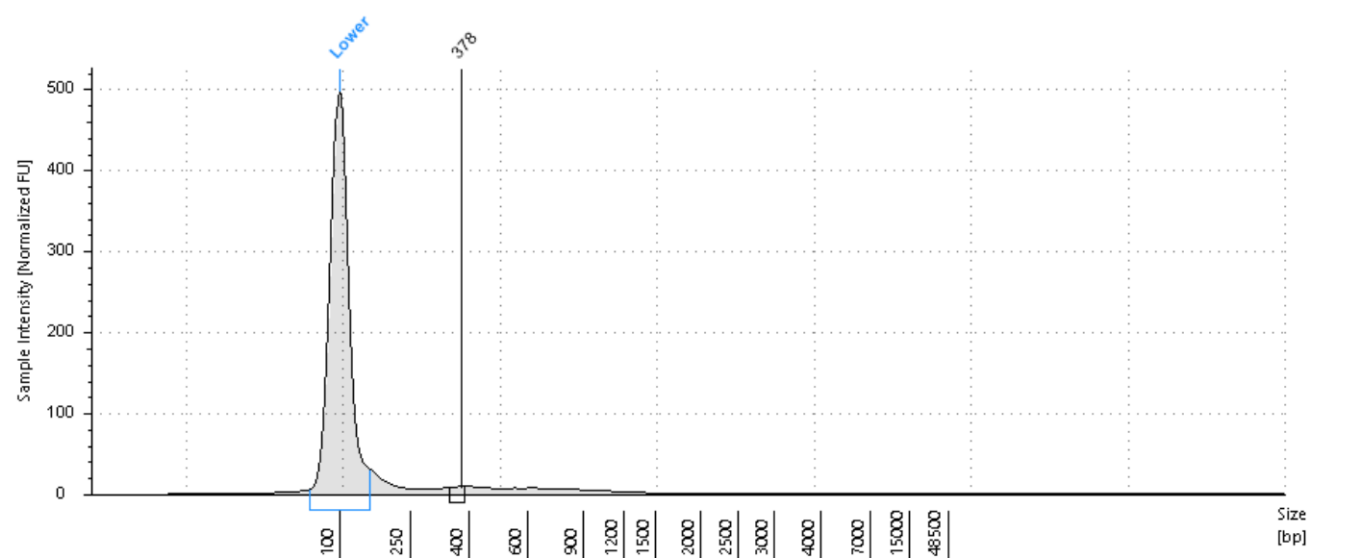
Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	149		Lower Marker
390	1.25	-	35.68	272	458		
603	1.22	-	34.93	488	706		
834	1.03	-	29.39	726	992		



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
200	9000	864	5.23	14.6	86.30		

B2: LGM38610

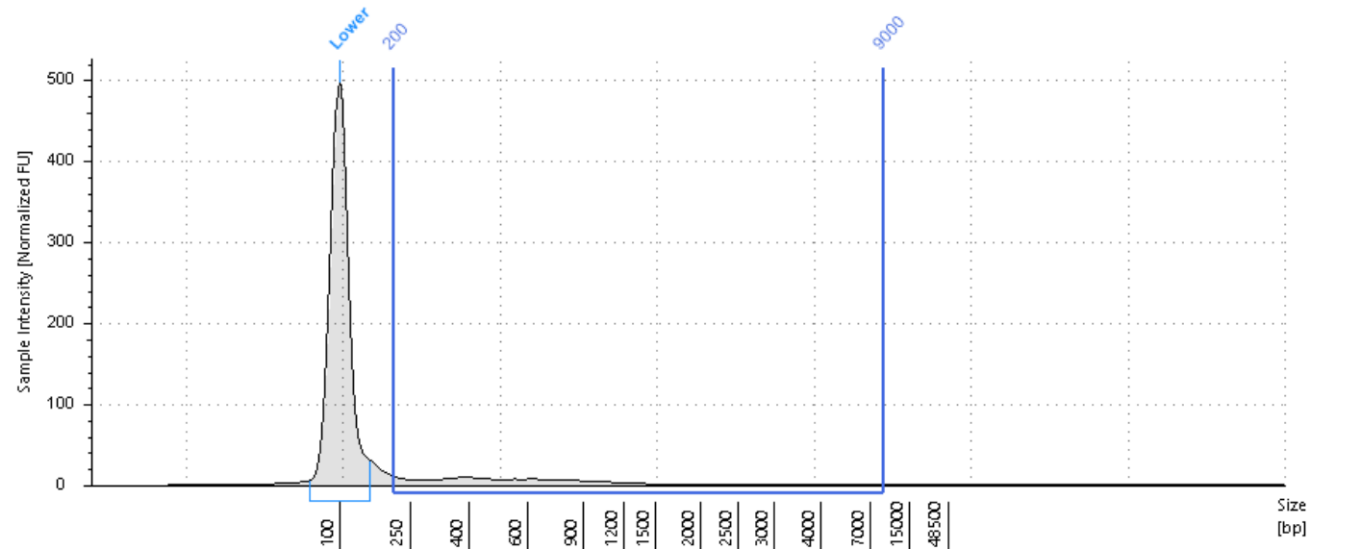


Sample Table

Well	DIN	Conc. [ng/μl]	Sample Description
B2	-	1.76	LGM38610

Peak Table

Size [bp]	Calibrated Conc. [ng/μl]	Assigned Conc. [ng/μl]	% Integrated Area	From [bp]	To [bp]	Peak Comment	Observations
100	8.50	8.50	-	68	149		Lower Marker
378	0.105	-	71.67	345	386		
-	-	-	-	-	-		Sample Well



Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
200	9000	896	1.28	4.55	72.59		



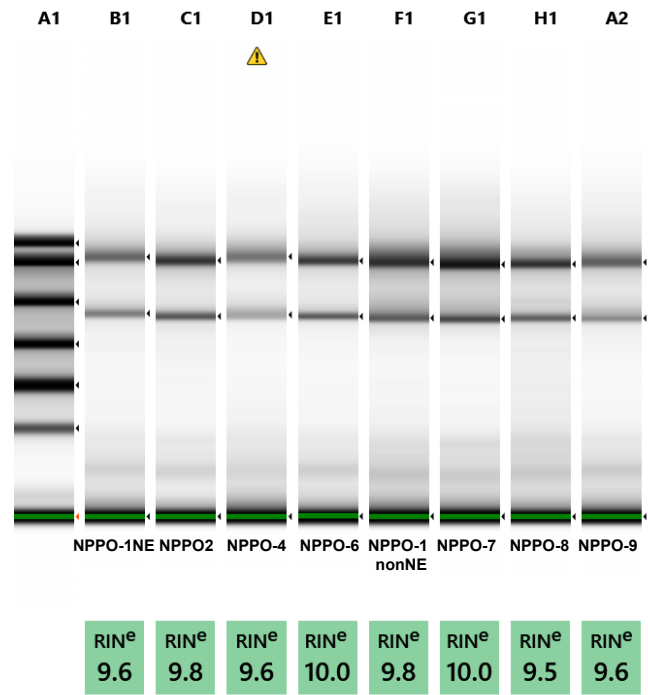
Azenta NGS Laboratory
Library QC Report

Name: Jia Li
Institution: Columbia University
Quotation Number: 30-1130063907

Sample #	Sample Name	AZENTA ID	Library QC					
			TapeStation Data				Qubit Data	
			Dilution factor	Average library size (bp)	Nucleic acid conc.(ng/µl)	Nucleic acid conc.(nM)	Nucleic acid conc.(ng/µl)	Nucleic acid conc.(nM)
1	1	LGM38606	1.00	738.00	9.45	28.70	8.03	16.49
2	2	LGM38607	1.00	766.00	10.00	28.70	9.78	19.34
3	3	LGM38608	1.00	865.00	8.02	23.00	7.01	12.28
4	4	LGM38609	1.00	864.00	5.23	14.60	4.70	8.24
5	5	LGM38610	1.00	896.00	1.28	4.55	1.41	2.38

Related to Figure 2f; Extended Data Figure 4b

Filename: SampleQC_1-8_30-1125587033.cRNA

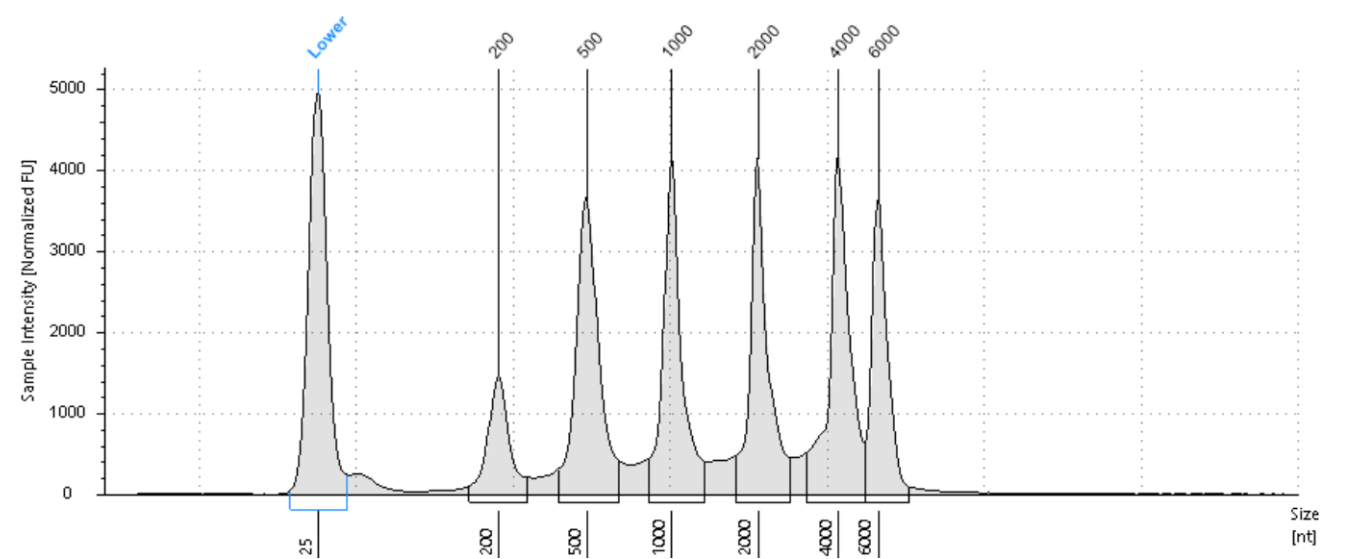


Default image (Contrast 100%)

Sample Info

Well	RINe	28S/18S (Area)	Conc. [ng/μl]	Sample Description
A1	-	-	84.9	Electronic Ladder
B1	9.6	1.7	26.0	SGM38539
C1	9.8	1.9	30.9	SGM38540
D1	9.6	2.1	22.2	SGM38541
E1	10.0	2.0	27.8	SGM38542
F1	9.8	1.9	39.6	SGM38543
G1	10.0	2.3	42.1	SGM38544
H1	9.5	1.8	37.1	SGM38545
A2	9.6	1.9	26.7	SGM38546

A1: Electronic Ladder



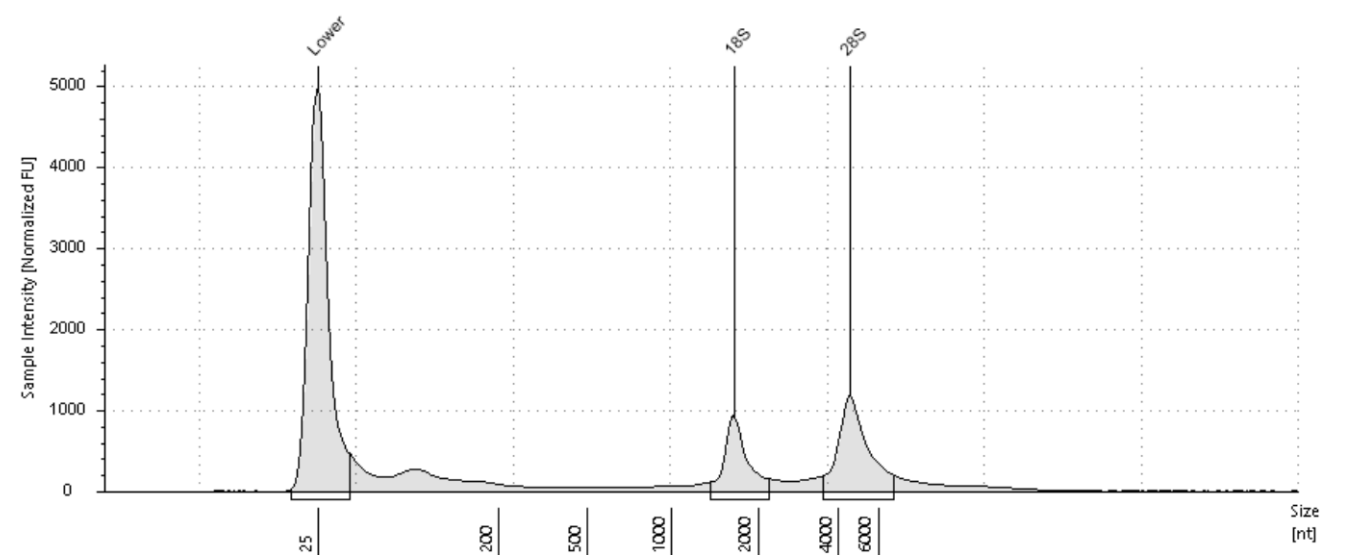
Sample Table

Well	RINe	28S/18S (Area)	Conc. [ng/ul]	Sample Description
A1	-	-	84.9	Electronic Ladder

Peak Table

Size [nt]	Calibrated Conc. [ng/ul]	Assigned Conc. [ng/ul]	Peak Molarity [nmol/l]	% Integrated Area
25	40.0	40.0	4710	-
200	5.94	-	87.4	7.80
500	15.9	-	93.6	20.88
1000	14.2	-	41.8	18.62
2000	13.8	-	20.3	18.11
4000	15.5	-	11.4	20.38
6000	10.8	-	5.31	14.22

B1: SGM38539

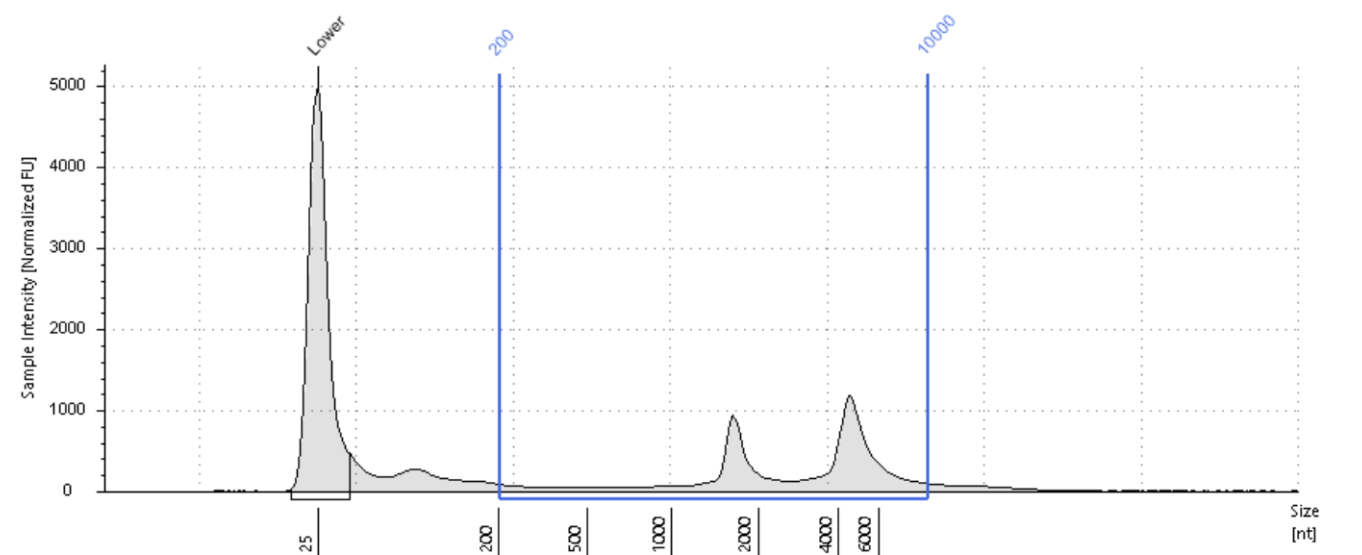


Sample Table

Well	RINe	28S/18S (Area)	Conc. [ng/ul]	Sample Description
B1	9.6	1.7	26.0	SGM38539

Peak Table

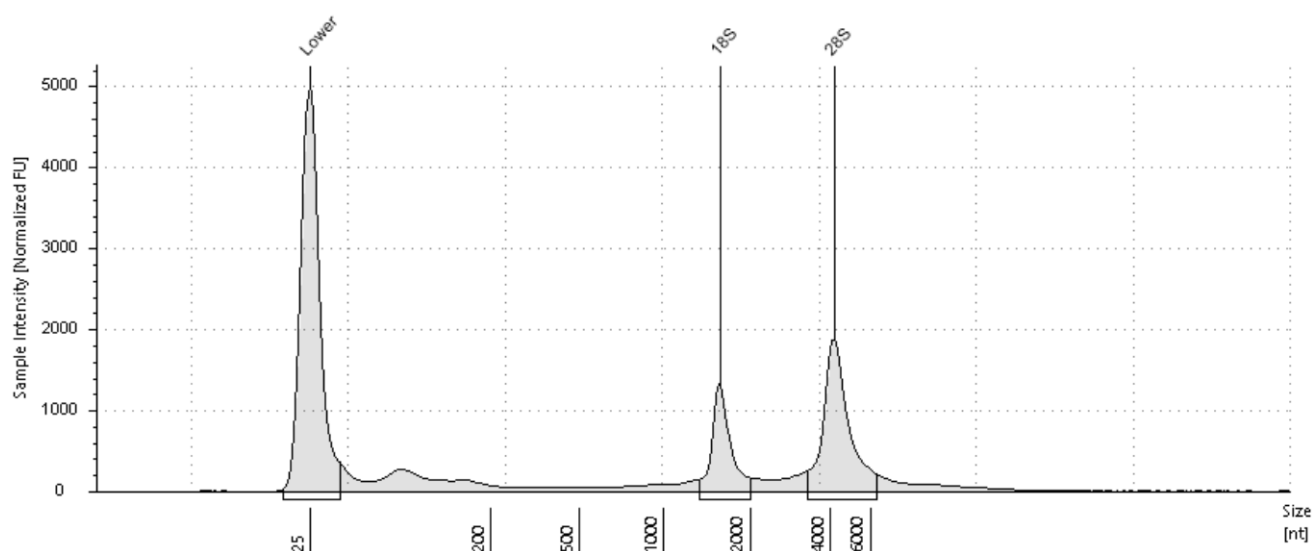
Size [nt]	Calibrated Conc. [ng/ul]	Assigned Conc. [ng/ul]	Peak Molarity [nmol/l]	% Integrated Area
25	40.0	40.0	4710	-
1661	4.93	-	8.72	36.70
4517	8.50	-	5.53	63.30



Region Table

From [nt]	To [nt]	Average Size [nt]	Conc. [ng/ul]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
200	10000	4867	18.5	11.2	71.13		

C1: SGM38540

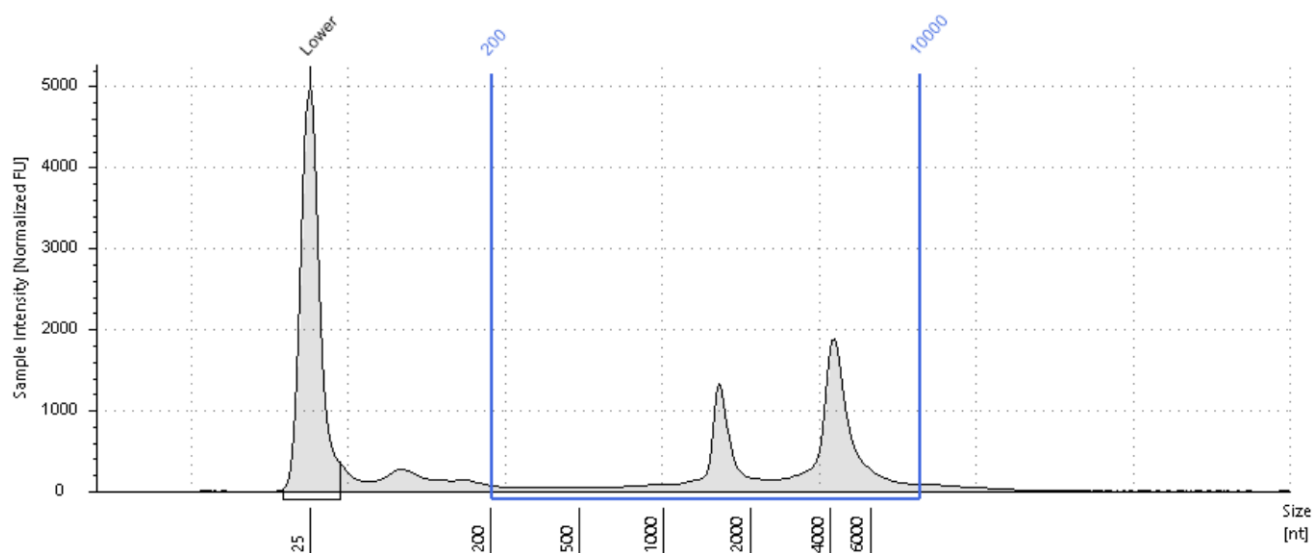


Sample Table

Well	RINe	28S/18S (Area)	Conc. [ng/ul]	Sample Description
C1	9.8	1.9	30.9	SGM38540

Peak Table

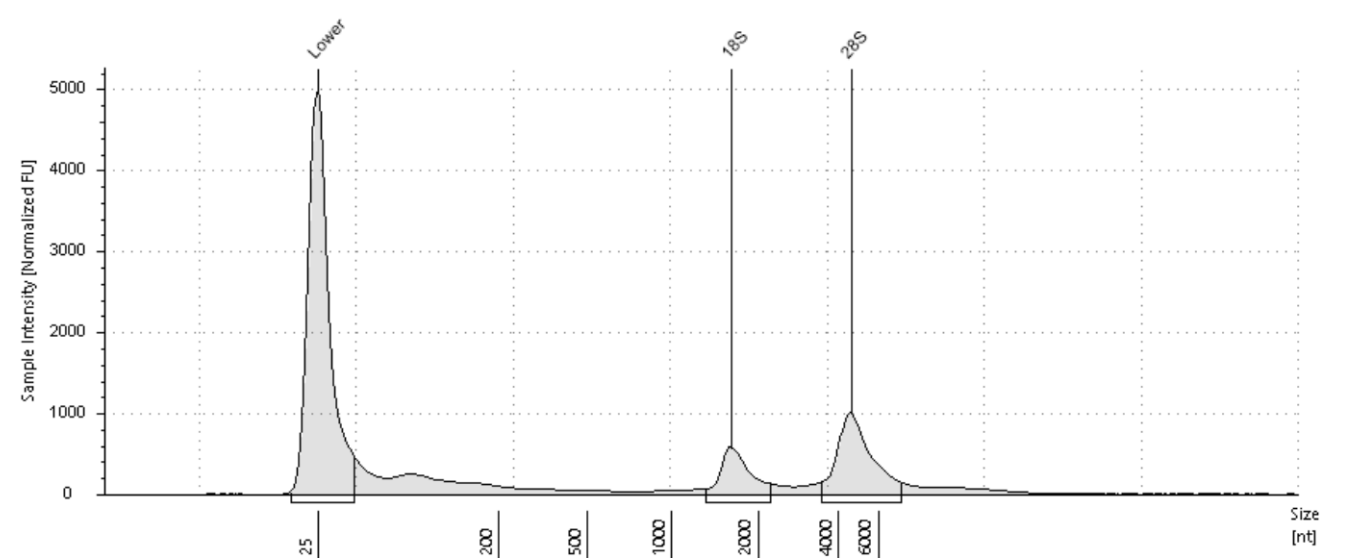
Size [nt]	Calibrated Conc. [ng/ul]	Assigned Conc. [ng/ul]	Peak Molarity [nmol/l]	% Integrated Area
25	40.0	40.0	4710	-
1580	6.15	-	11.5	34.03
4174	11.9	-	8.40	65.97



Region Table

From [nt]	To [nt]	Average Size [nt]	Conc. [ng/ul]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
200	10000	4477	24.3	15.9	78.39		

D1: SGM38541

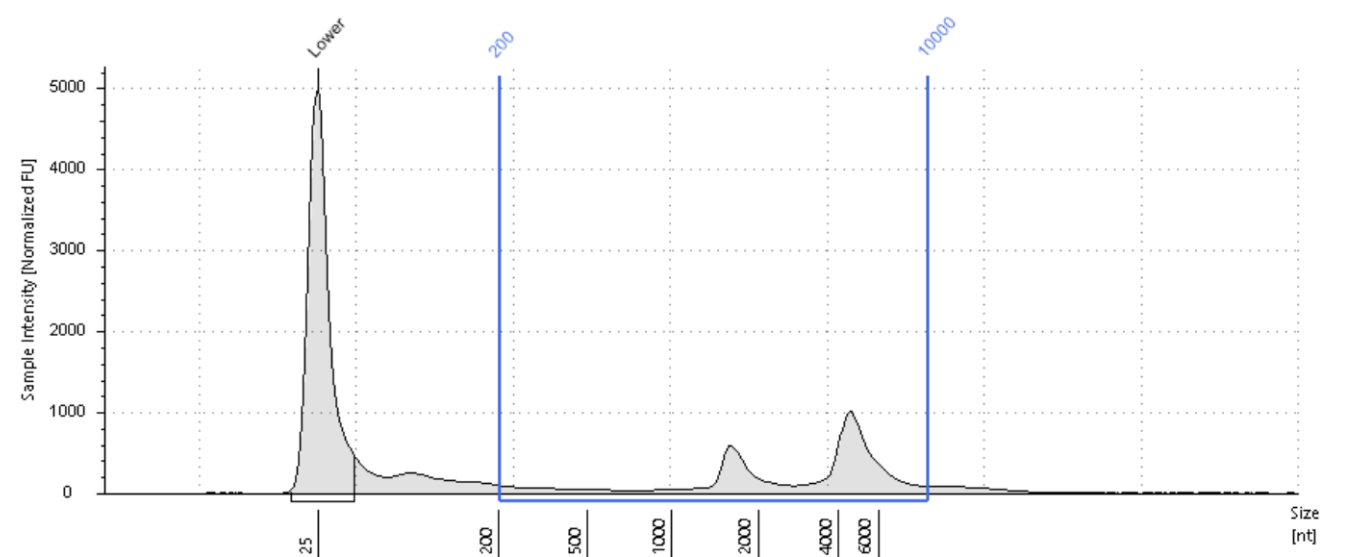


Sample Table

Well	RINe	28S/18S (Area)	Conc. [ng/ul]	Sample Description
D1	9.6	2.1	22.2	SGM38541

Peak Table

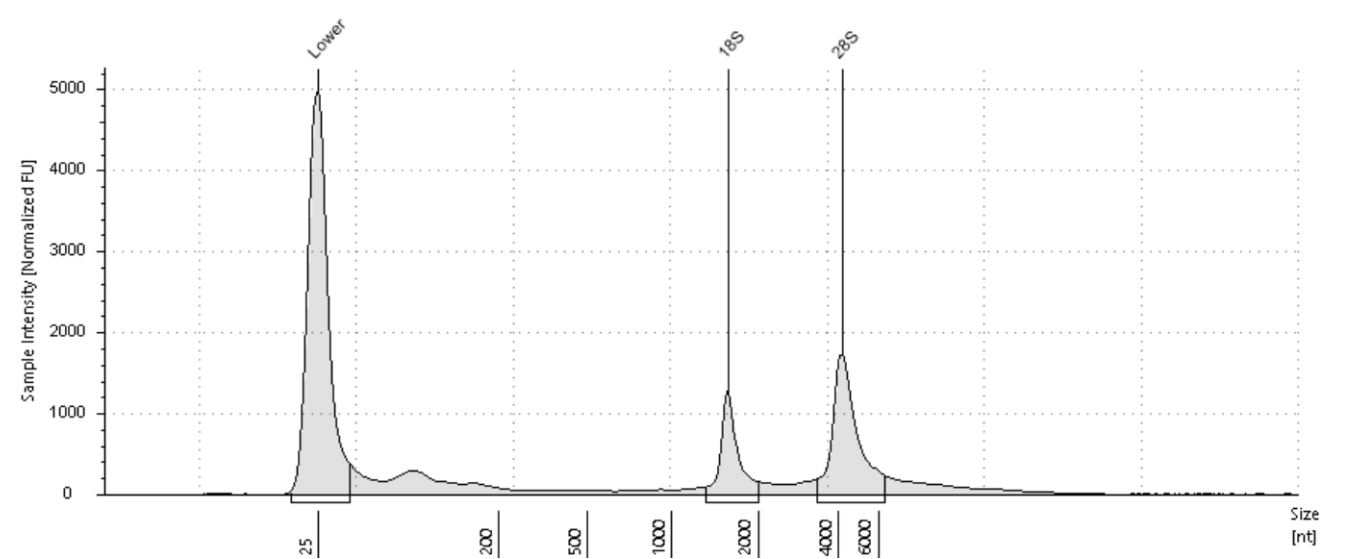
Size [nt]	Calibrated Conc. [ng/ul]	Assigned Conc. [ng/ul]	Peak Molarity [nmol/l]	% Integrated Area
25	40.0	40.0	4710	-
1620	3.72	-	6.76	32.38
4540	7.77	-	5.03	67.62



Region Table

From [nt]	To [nt]	Average Size [nt]	Conc. [ng/ul]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
200	10000	4970	15.2	8.97	68.37		

E1: SGM38542

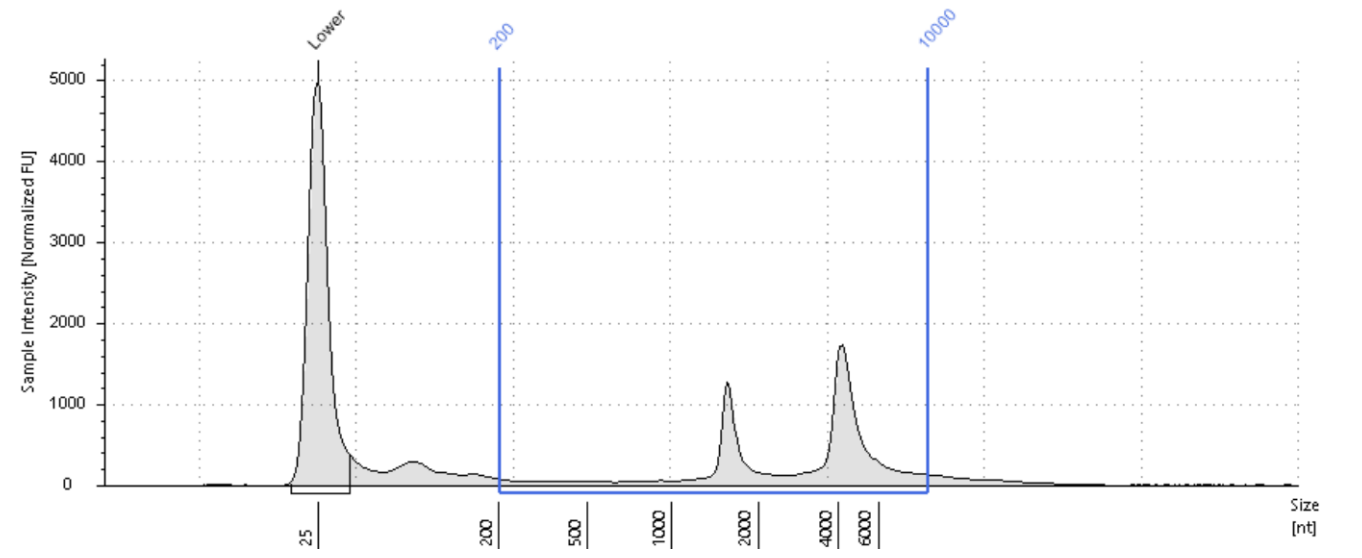


Sample Table

Well	RINe	28S/18S (Area)	Conc. [ng/ul]	Sample Description
E1	10.0	2.0	27.8	SGM38542

Peak Table

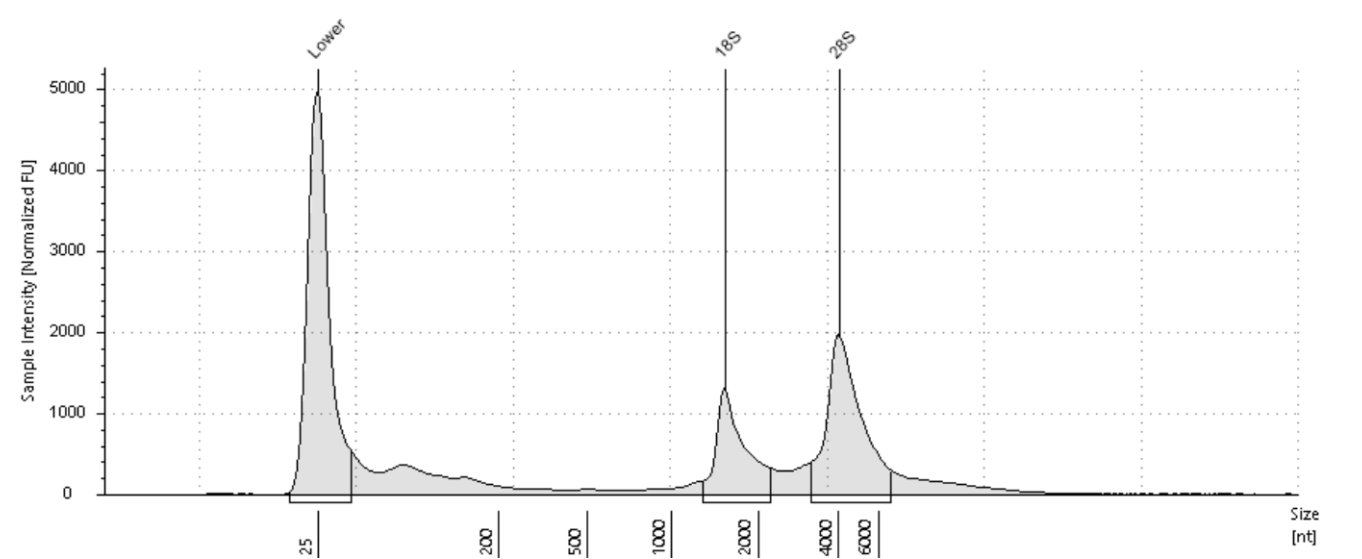
Size [nt]	Calibrated Conc. [ng/ul]	Assigned Conc. [ng/ul]	Peak Molarity [nmol/l]	% Integrated Area
25	40.0	40.0	4710	-
1571	5.01	-	9.37	33.35
4128	10.0	-	7.13	66.65



Region Table

From [nt]	To [nt]	Average Size [nt]	Conc. [ng/ul]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
200	10000	4761	20.3	12.5	72.91		<div></div>

F1: SGM38543

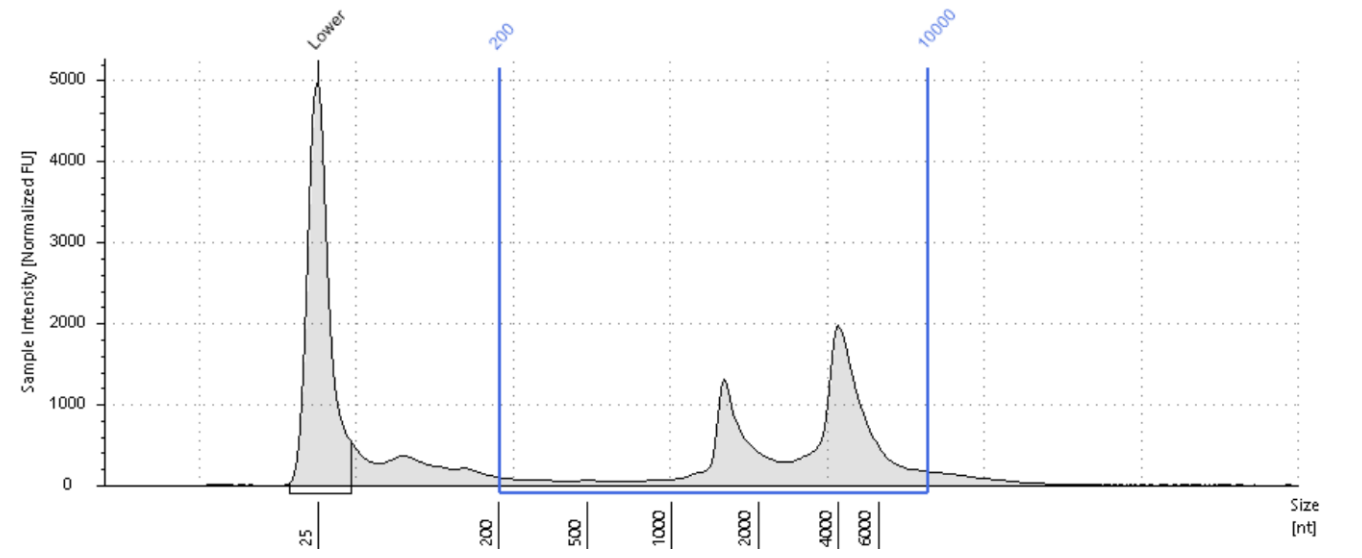


Sample Table

Well	RINe	28S/18S (Area)	Conc. [ng/ul]	Sample Description
F1	9.8	1.9	39.6	SGM38543

Peak Table

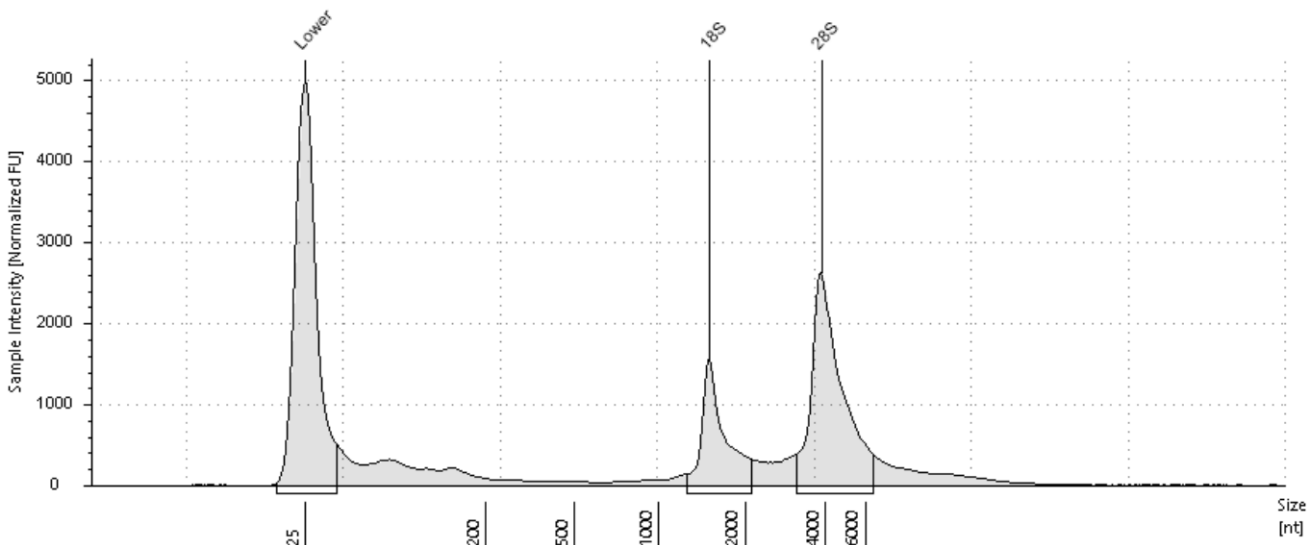
Size [nt]	Calibrated Conc. [ng/ul]	Assigned Conc. [ng/ul]	Peak Molarity [nmol/l]	% Integrated Area
25	40.0	40.0	4710	-
1534	8.20	-	15.7	34.95
4023	15.3	-	11.2	65.05



Region Table

From [nt]	To [nt]	Average Size [nt]	Conc. [ng/ul]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
200	10000	4655	30.0	19.0	75.85		

G1: SGM38544

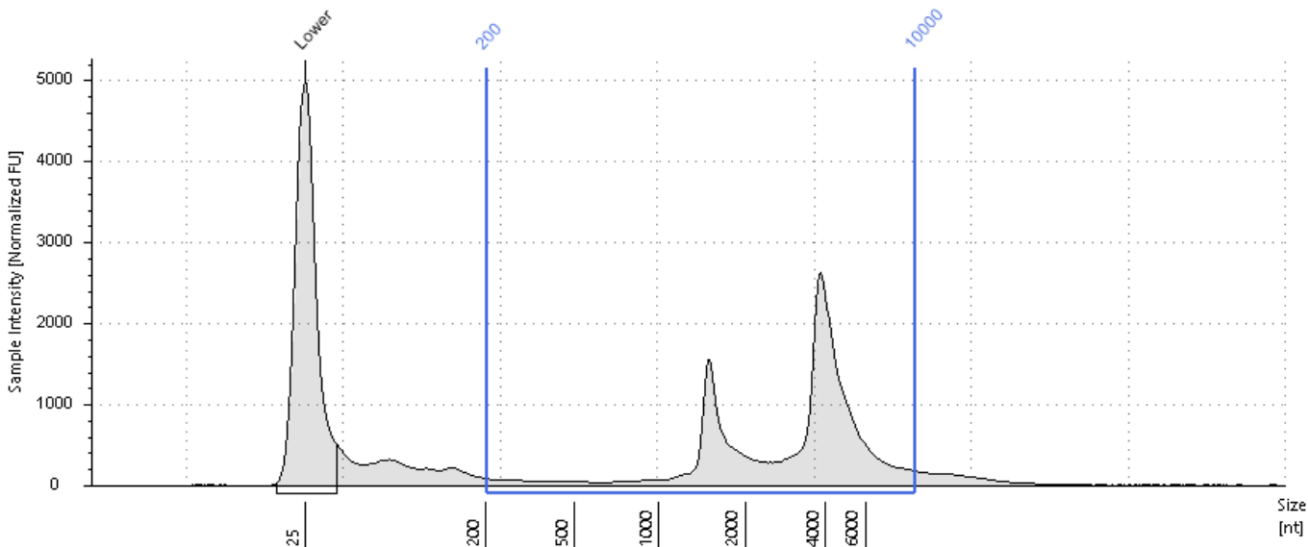


Sample Table

Well	RINe	28S/18S (Area)	Conc. [ng/ul]	Sample Description
G1	10.0	2.3	42.1	SGM38544

Peak Table

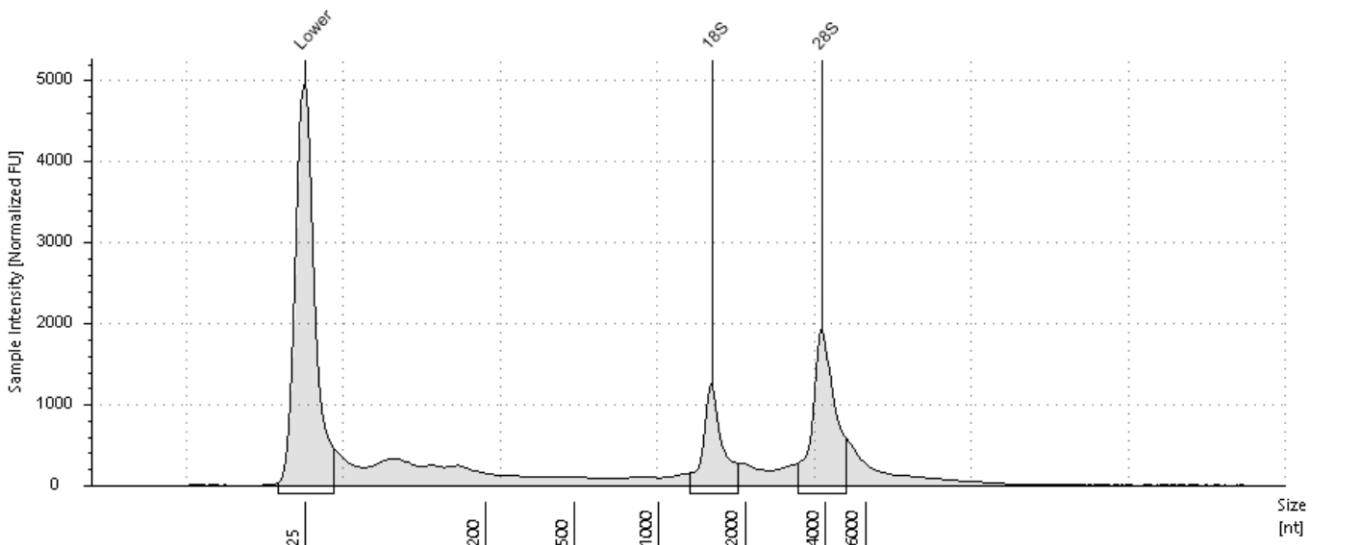
Size [nt]	Calibrated Conc. [ng/ul]	Assigned Conc. [ng/ul]	Peak Molarity [nmol/l]	% Integrated Area
25	40.0	40.0	4710	-
1511	8.01	-	15.6	30.60
3862	18.2	-	13.8	69.40



Region Table

From [nt]	To [nt]	Average Size [nt]	Conc. [ng/ul]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
200	10000	4643	32.9	20.8	78.04		<div></div>

H1: SGM38545

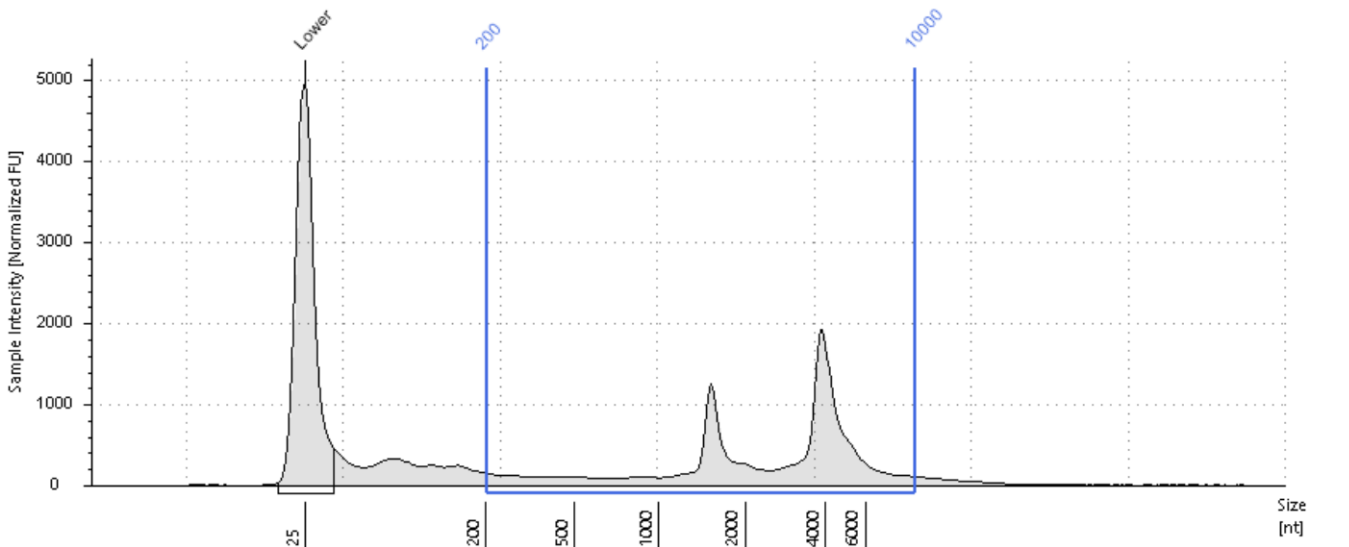


Sample Table

Well	RINe	28S/18S (Area)	Conc. [ng/ul]	Sample Description
H1	9.5	1.8	37.1	SGM38545

Peak Table

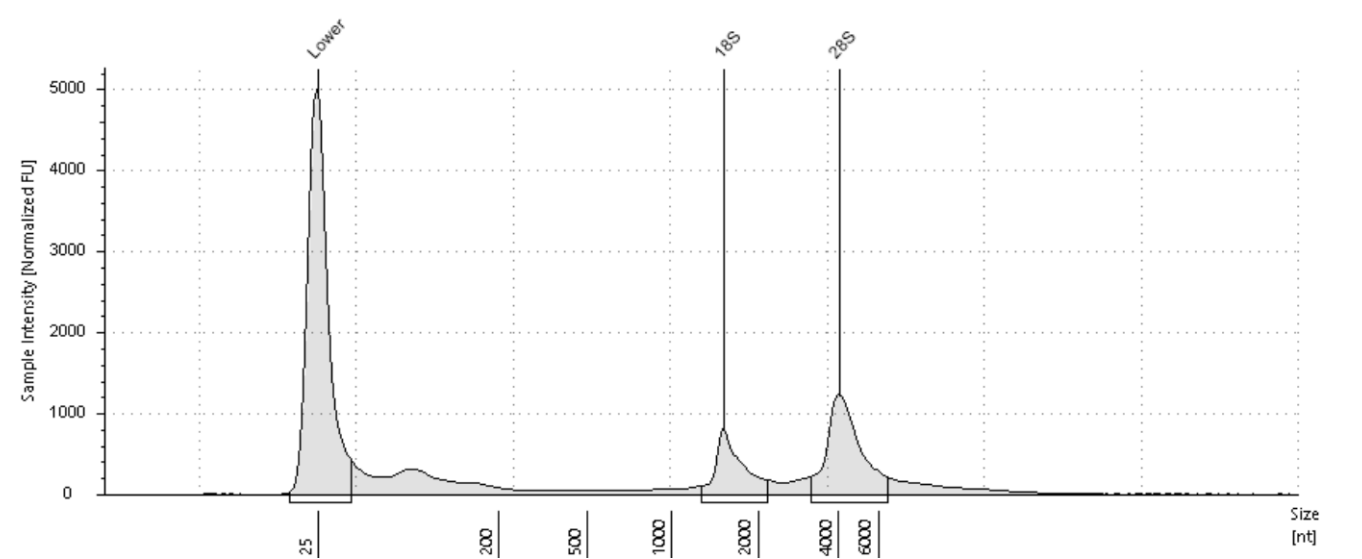
Size [nt]	Calibrated Conc. [ng/ul]	Assigned Conc. [ng/ul]	Peak Molarity [nmol/l]	% Integrated Area
25	40.0	40.0	4710	-
1539	5.76	-	11.0	35.49
3897	10.5	-	7.91	64.51



Region Table

From [nt]	To [nt]	Average Size [nt]	Conc. [ng/ul]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
200	10000	4432	27.3	18.1	73.62		

A2: SGM38546

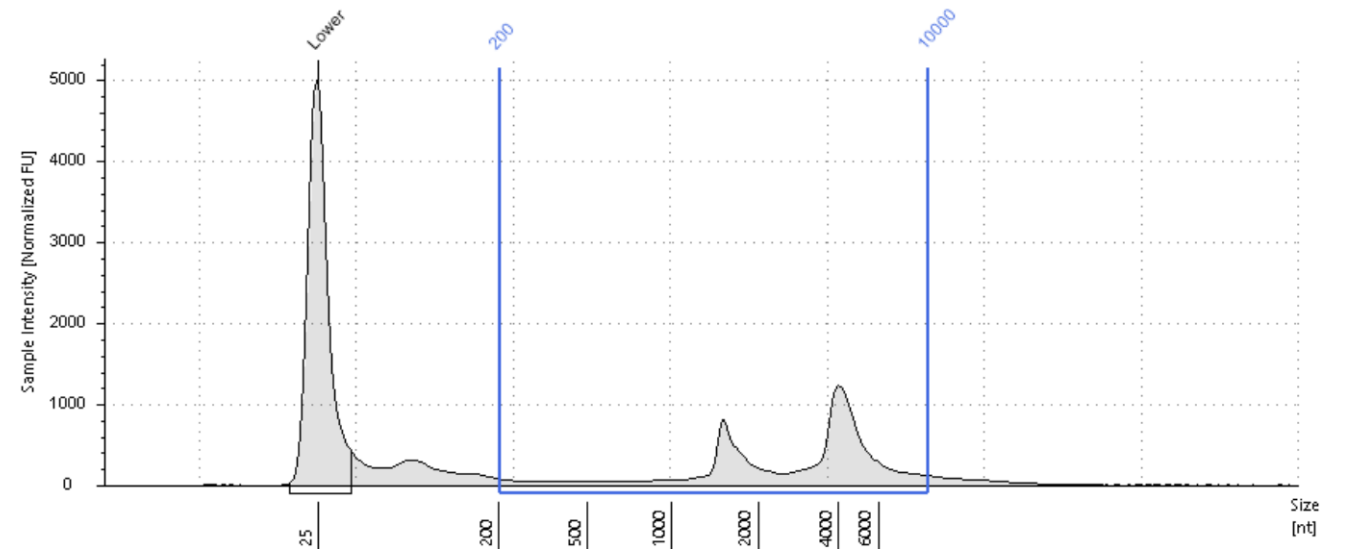


Sample Table

Well	RINe	28S/18S (Area)	Conc. [ng/ul]	Sample Description
A2	9.6	1.9	26.7	SGM38546

Peak Table

Size [nt]	Calibrated Conc. [ng/ul]	Assigned Conc. [ng/ul]	Peak Molarity [nmol/l]	% Integrated Area
25	40.0	40.0	4710	-
1531	4.89	-	9.39	33.98
4022	9.50	-	6.95	66.02



Region Table

From [nt]	To [nt]	Average Size [nt]	Conc. [ng/ul]	Region Molarity [nmol/l]	% of Total	Region Comment	Color
200	10000	4743	19.1	11.8	71.50		



Azenta NGS Laboratory Sample QC Form

Name: Jia Li

Institute: Columbia University

Quotation Number: 30-1125587033

Sample ID	AZENTA ID	Sample Type	Sample Vol.(ul)	Nanodrop 2000				DNA Qubit		RNA Qubit		TapeStation			QC Note
				Actual Nucleic Acid Conc. (ng/ul)	Total Amount (ng)	A260/A280	A260/A230	Actual Nucleic Acid Conc. (ng/ul)	Total Amount (ng)	Actual Nucleic Acid Conc. (ng/ul)	Total Amount (ng)	Average Size for DNA	RIN for RNA	DV 200 (for RNA)	
NPPO1-NE	SGM38539	Total RNA	20	178.80	3576.00	1.79	0.55	7.80	156.00	102.00	2040.00	NA	9.6	71.13	
NPPO2	SGM38540	Total RNA	20	123.70	2474.00	1.89	0.87	7.02	140.40	89.40	1788.00	NA	9.8	78.39	
NPPO4	SGM38541	Total RNA	20	161.60	3232.00	1.81	0.44	6.24	124.80	76.80	1536.00	NA	9.6	68.37	3
NPPO6	SGM38542	Total RNA	20	237.00	4740.00	1.78	0.64	7.98	159.60	97.80	1956.00	NA	10.0	72.91	
NPPO-1nonNE	SGM38543	Total RNA	20	156.50	3130.00	1.85	1.20	11.10	222.00	118.20	2364.00	NA	9.8	75.85	
NPPO7	SGM38544	Total RNA	20	197.90	3958.00	1.90	0.99	11.82	236.40	136.20	2724.00	NA	10.0	78.04	
NPPO8	SGM38545	Total RNA	20	200.10	4002.00	1.90	1.23	11.76	235.20	110.40	2208.00	NA	9.5	73.62	4
NPPO9	SGM38546	Total RNA	20	196.70	3934.00	1.88	1.14	10.38	207.60	132.60	2652.00	NA	9.6	71.50	

QC Note Legend for RNA

Number	Note
1	Not enough starting material
2	RIN<6
3	DV200<70
4	DNA Spot Check >10%

QC Note Legend for DNA

Number	Note
1	Not enough starting material
2	RNA Spot Check >10%