

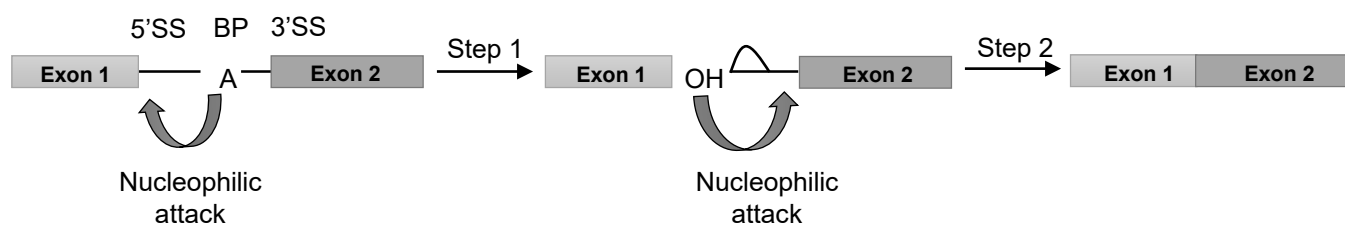
Effector	Link to splicing	System	Reference(s)
CTD	Interacts with splicing factors	Multiple	Vincent et al., 1996; Yuryev et al. 1996; Mortillaro et al., 1996; Kim et al., 1997; Misteli and Spector 1999; Carty et al., 2000; Emili et al., 2002; Rosonina et al., 2005; David et al., 2011; Nojima et al., 2015; Yu and Reed, 2015; Harlen et al., 2016
CTD	Stimulates splicing	<i>in vitro</i>	Hirose et al., 1999; Ghosh et al., 2000; Millhouse and Manley, 2005; Das et al., 2006
CTD	Stimulates splicing	Human cells	McCracken et al., 1997; Fong and Bentley, 2001
S2P	Required for recruitment of the U2 snRNP and splicing	Mammalian cells	Gu et al., 2013
S5P	Splicing factors associated with pol II.	<i>S. cerevisiae</i> , human cells	Harlen et al., 2017; Nojima et al., 2018
S5P	Splicing-dependent pol II pausing	<i>S. cerevisiae</i> ; human cells	Alexander et al., 2010; Nojima et al., 2015
S5P	Mutation to alanine causes intron retention	<i>S. cerevisiae</i>	Harlen et al, 2017
T4P	Mutation to valine causes defects in splicing	<i>S. cerevisiae</i>	Harlen et al., 2017
Ubiquitination	Reduced splicing efficiency upon deletion of Bre5 (part of a complex that deubiquitinates pol II)	<i>S. cerevisiae</i>	Milligan et al., 2017

Table 1:
Links between pol II and splicing

Factor	Link to splicing	System	Reference(s)
Spt4	Mutation causes splicing defects	<i>S. cerevisiae</i>	Lindstrom et al., 2003; Burckin et al., 2005; Xiao et al., 2005
Spt5	Mutation causes splicing defects	<i>S. cerevisiae</i>	Lindstrom et al., 2003; Burckin et al., 2005; Xiao et al., 2005
Spt5	Depletion causes pre-mRNA accumulation	Human cells; <i>S. pombe</i>	Diamant et al., 2012; Shetty et al., 2017
Spt5	Co-immunoprecipitates with U1	<i>S. cerevisiae</i>	Moore et al., 2006
P-TEFb	Interaction with splicing factor SKIP	Human cells	Bres et al., 2005
ELF7	Interaction with splicing factor SKIP	<i>A. thaliana</i>	Cao et al., 2015; Li et al., 2016; Yang et al., 2016
Med23	Interacts with splicing factors and RNAi depletion causes changes in alternative splicing patterns	Mouse cells	Huang et al., 2012

Table 2:
Links between transcription factors and splicing

A



B

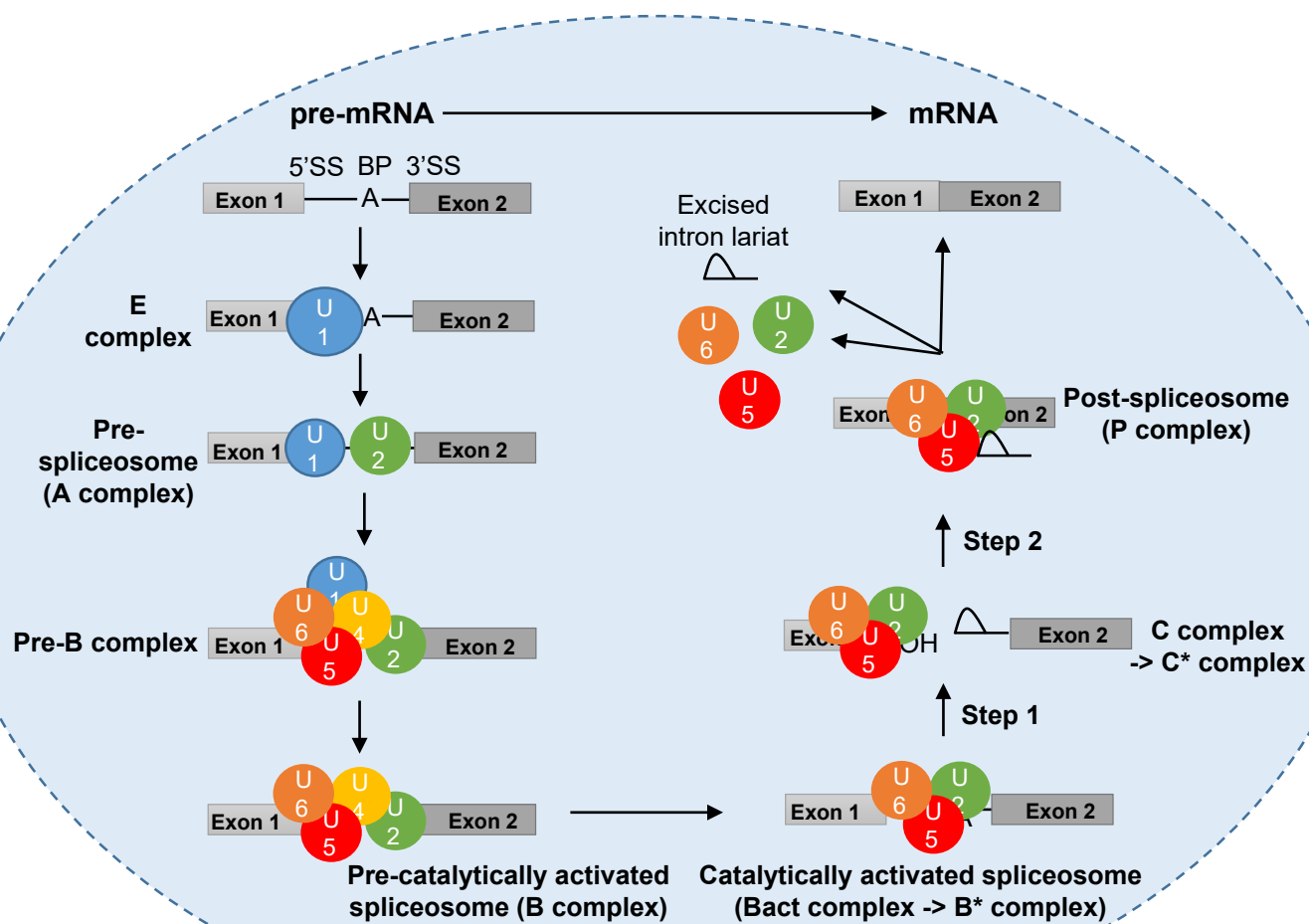


Figure 1

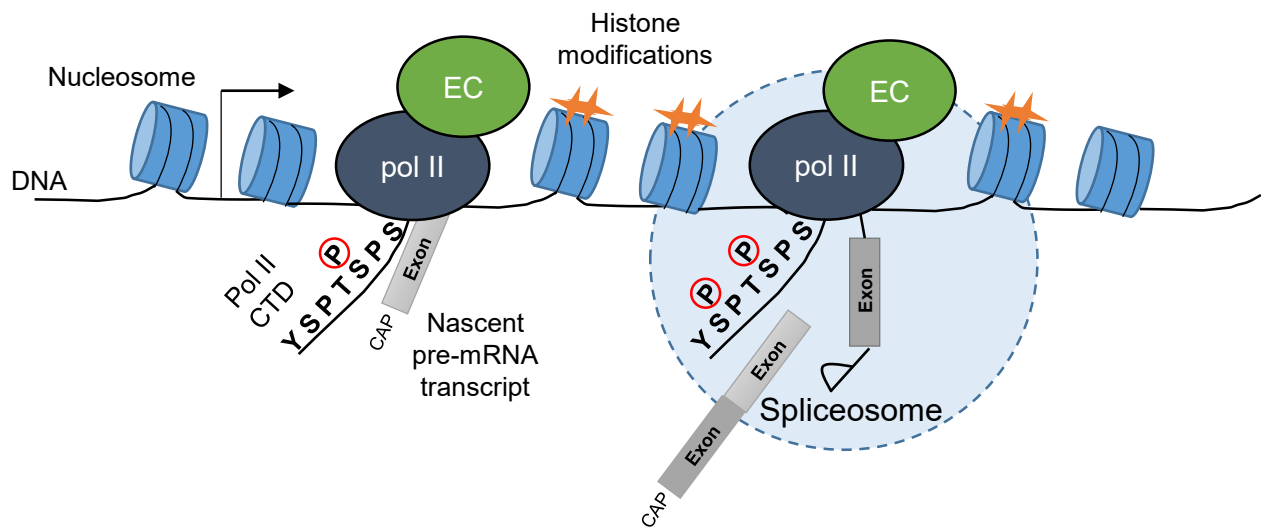
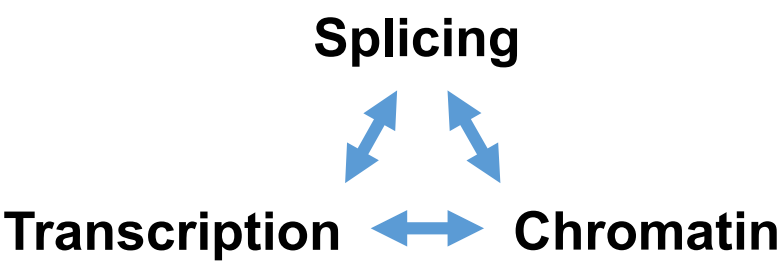
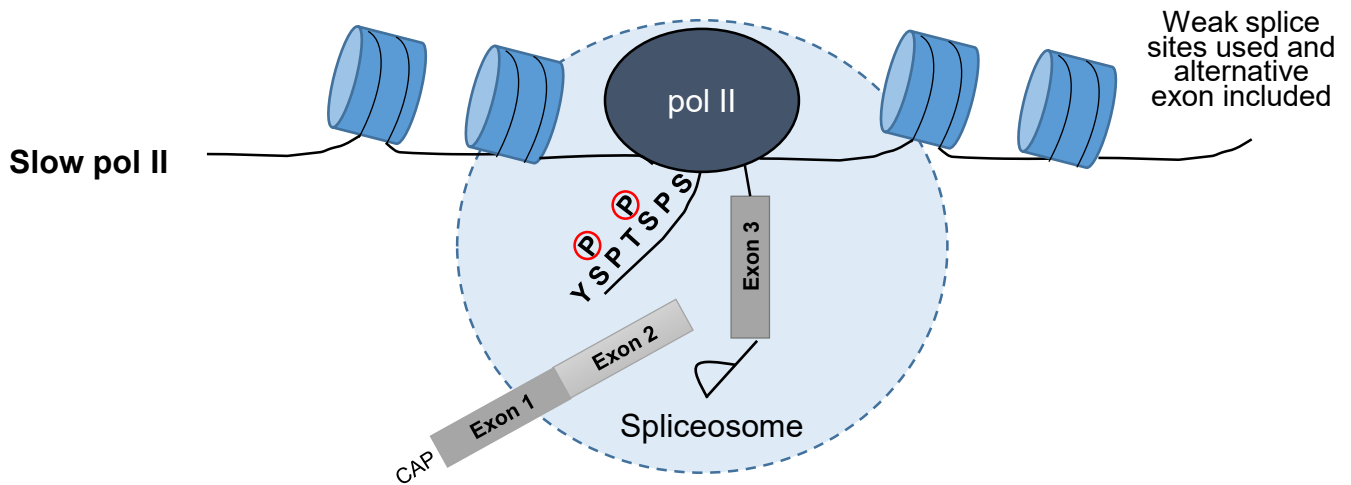
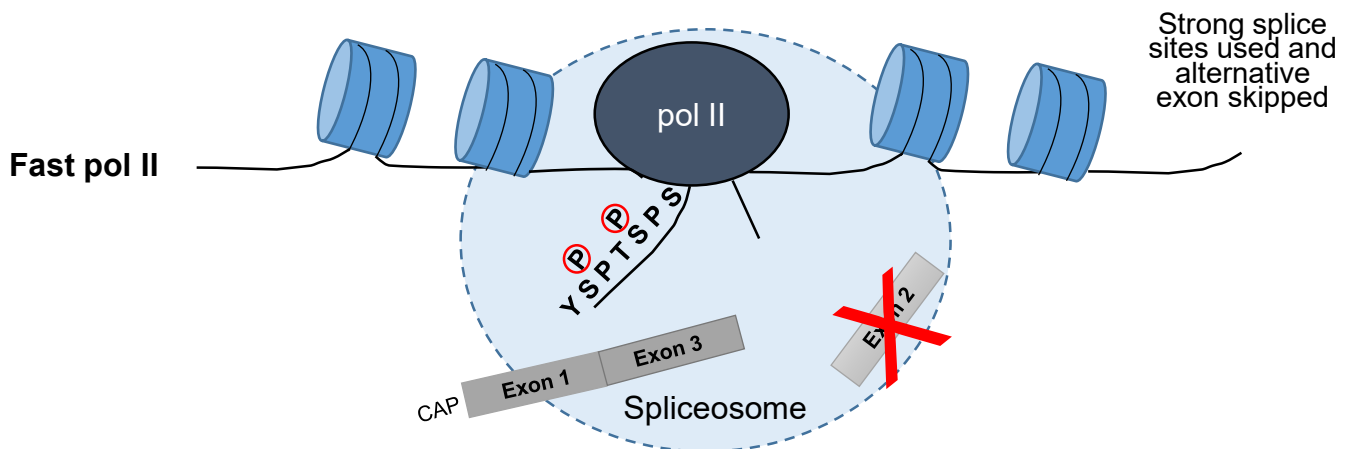


Figure 2



pol II mutants (Fong et al., 2014; Maslon et al., 2019)
 Transcription inhibitor drugs (Ip et al., 2011)
 CTCF and Pol II pausing (Shukla et al., 2012)



pol II mutants (Fong et al., 2014)
 Light and TFIIS (Godoy Herz et al, 2019)
 DNA methylation, no CTCF, no pol II pausing (Shukla et al., 2012)

Figure 3

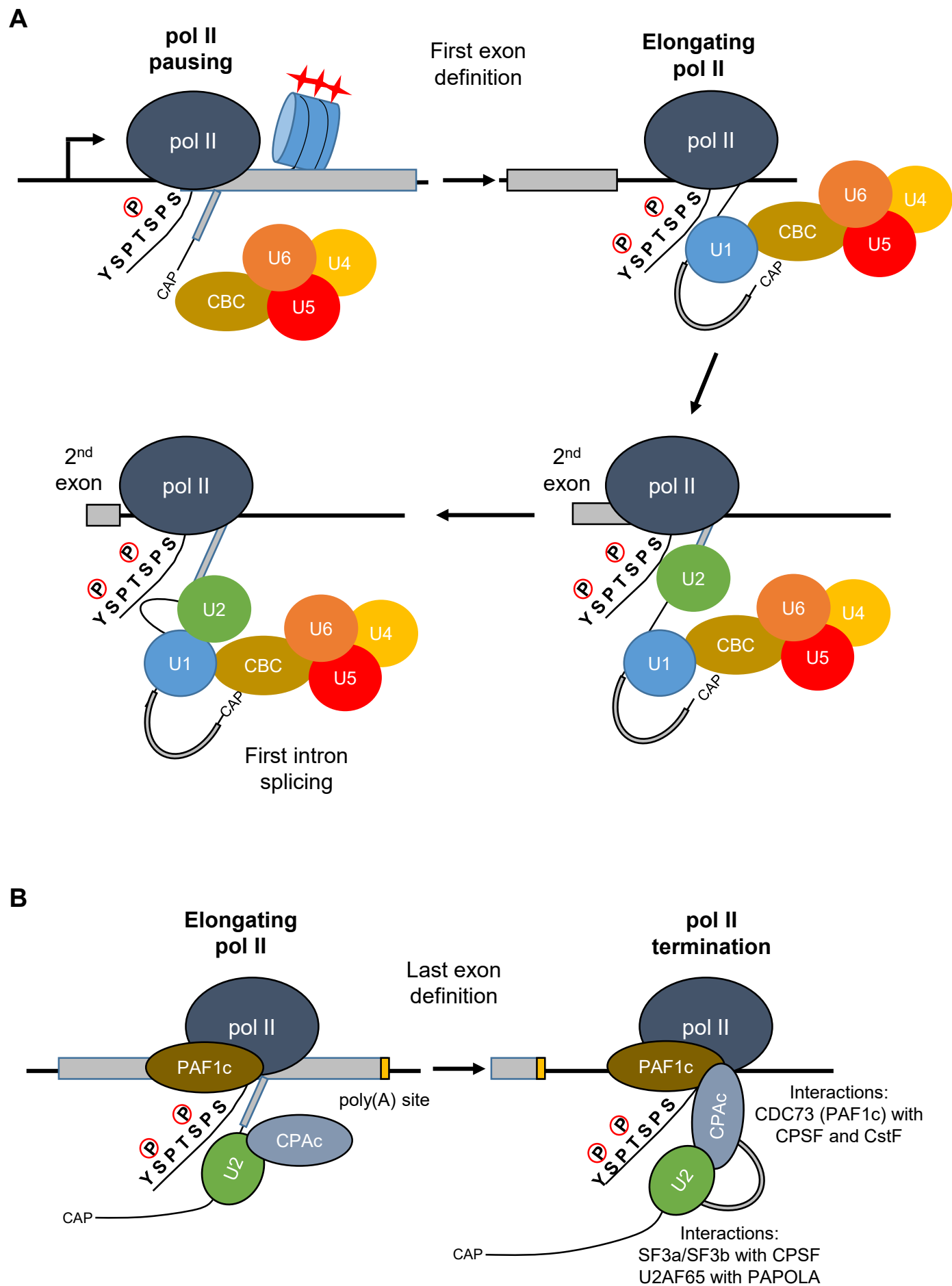


Figure 5