

FIG. S1. Information content (bits) in 5 nt of the exon regions adjacent to the intron in various length ranges of introns.

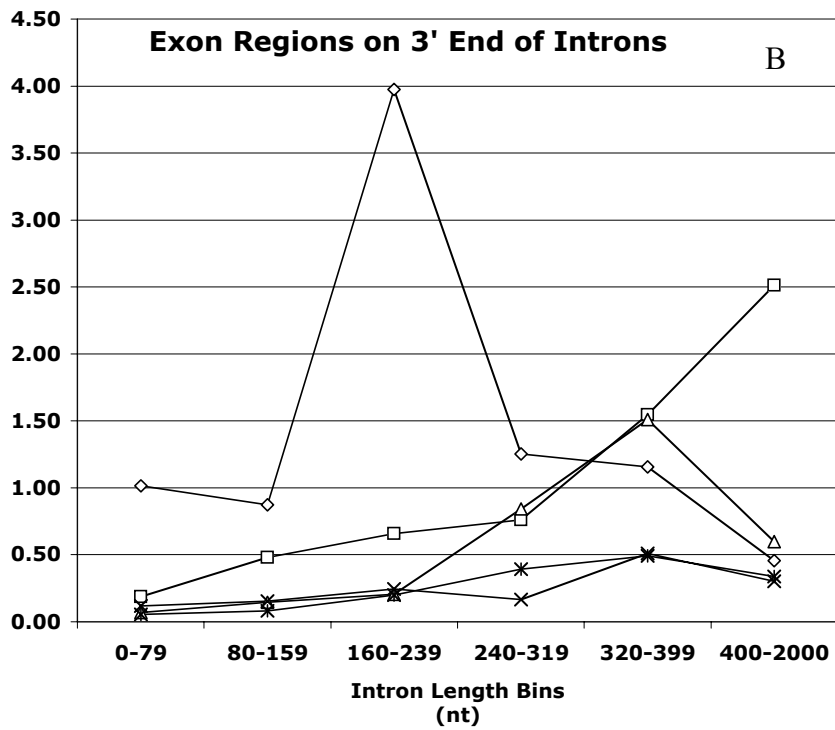
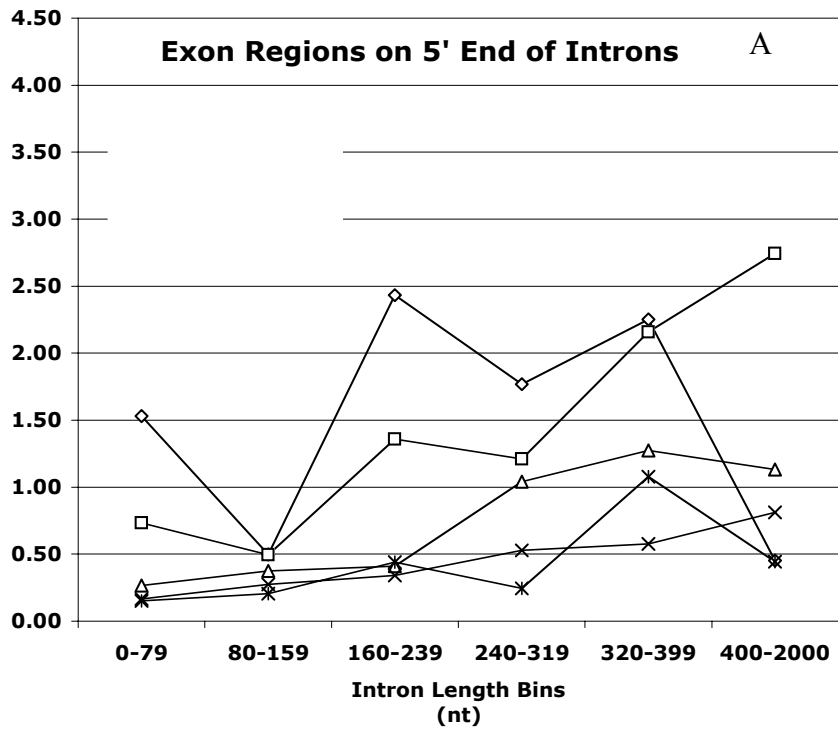
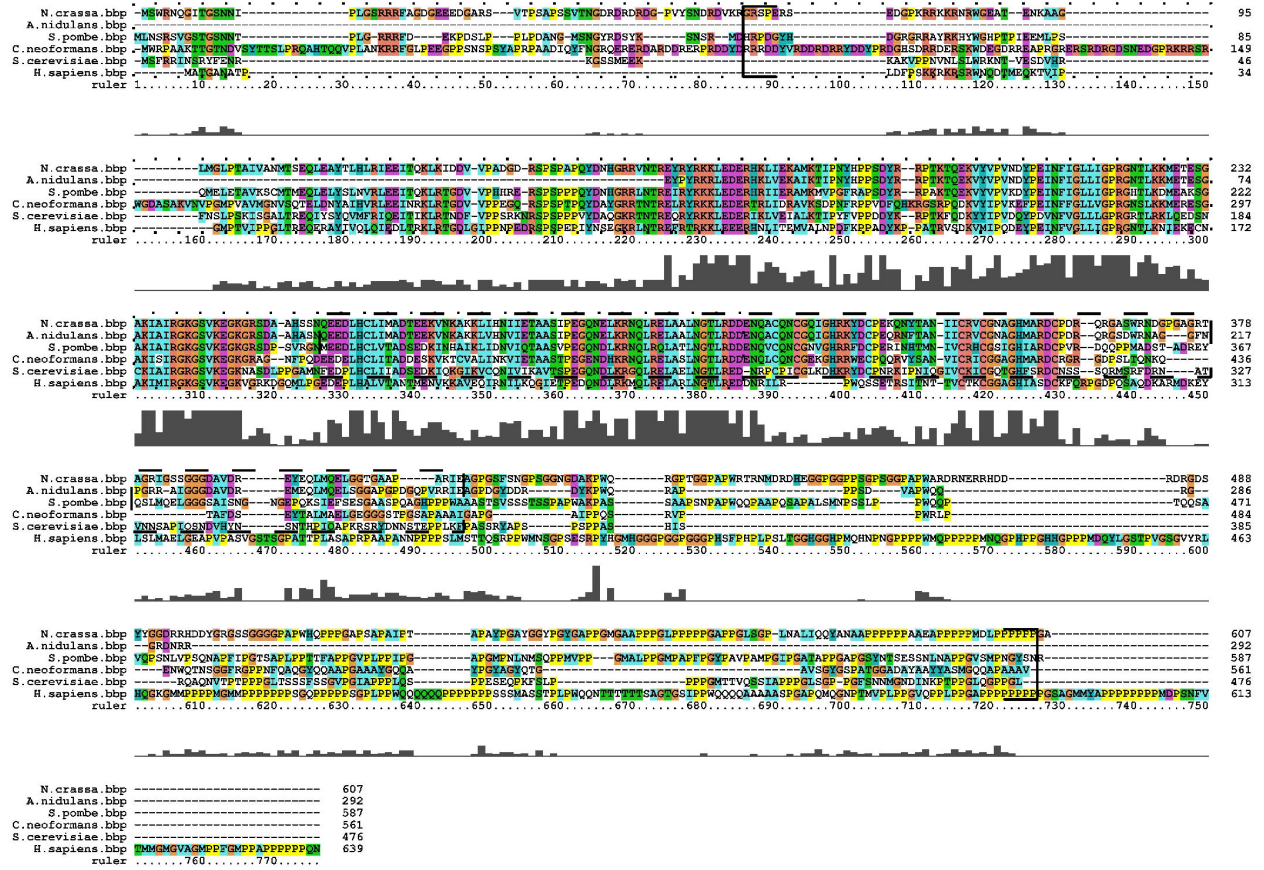


FIG. S2. Branchpoint binding protein (BBP) homologs. (A) Sequence alignment of the BBP homologs in *S. cerevisiae* (AC# NP\_013217.1), *S. pombe* (AC# AF073779 1), *A. nidulans* (1.84 (scaffold 5) <http://www.broad.mit.edu/annotation/fungi/aspergillus/geneindex.html> and AC# AA784699, region homologous to *S. pombe* BBP), *N. crassa* (AC# CAD36971.1), *C. neoformans*, B3501 serotype D (locus163.m02728 <http://www.tigr.org/tdb/e2k1/cna1/>), and *H. sapiens* SF1, (AC# CAA70018.1). The SF1/BBP (KOG0119) motif is in brackets, the MSL5 domain is in a dotted box, and the AIR domain is in a dashed box. (B) Phylogram for BBP homologs.

A



B

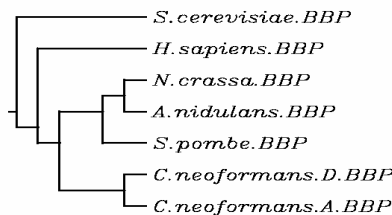
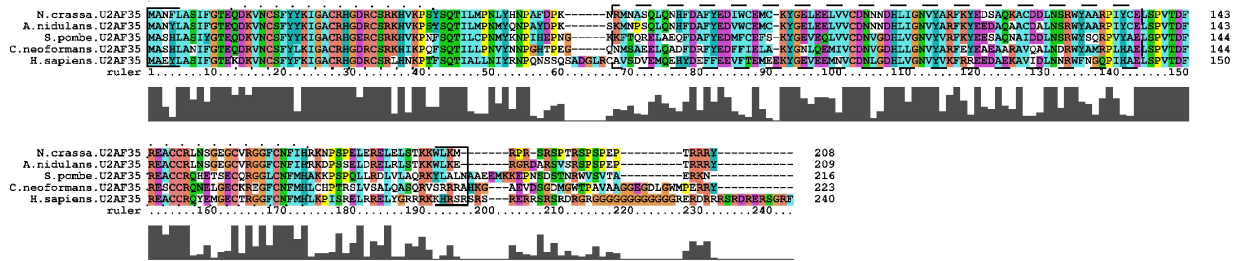




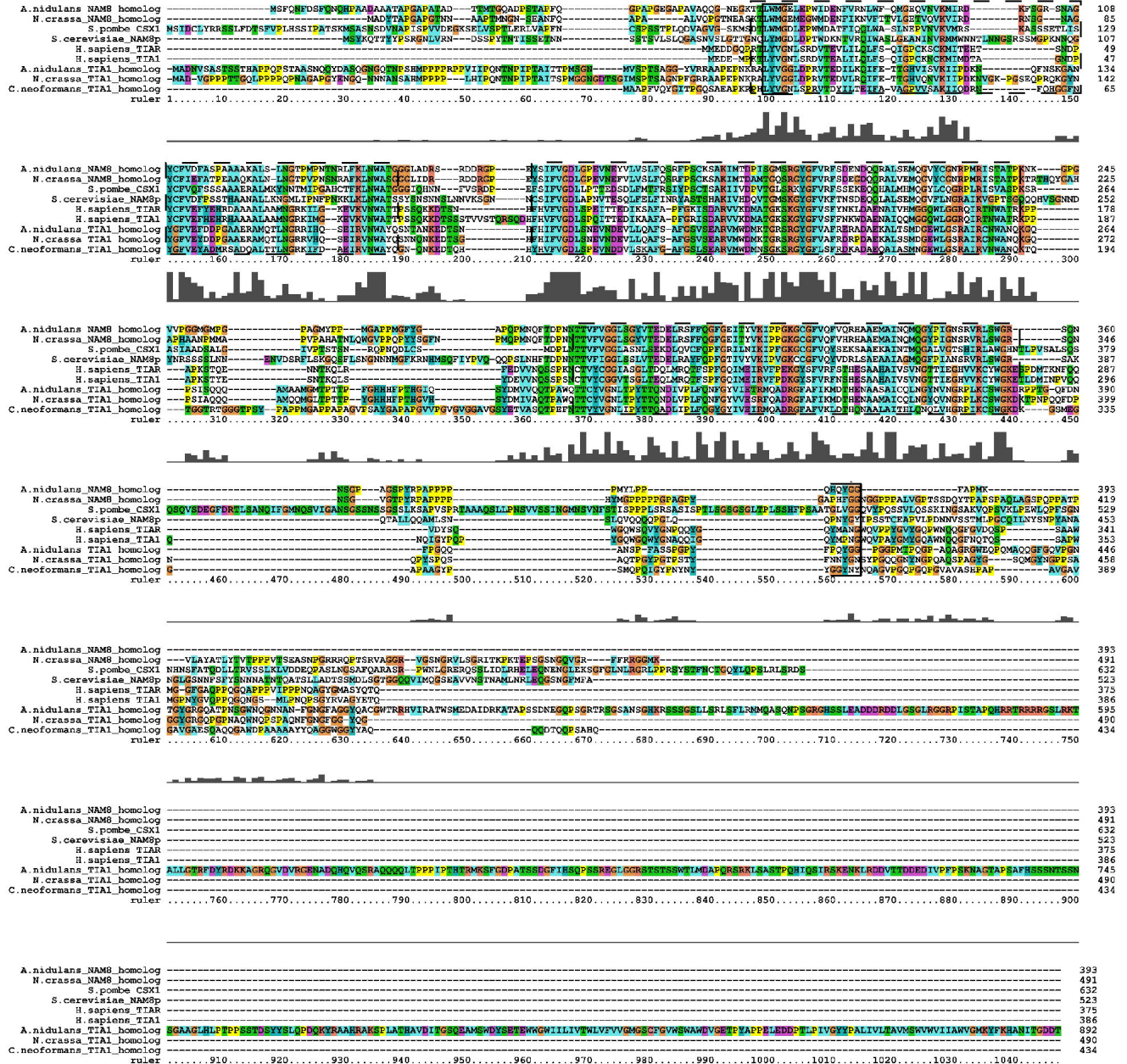
FIG. S4. U2AF<sup>35</sup> protein homologs. Sequence alignment of the U2AF<sup>35</sup> homologs in *N. crassa* (contig 3.170 (scaffold 9), <http://www-genome.wi.mit.edu/cgi-bin/annotation/Neurospora>, region homologous with *S. pombe* U2AF<sup>35</sup>), *A. nidulans* (1.172 (scaffold 16) <http://www.broad.mit.edu/annotation/fungi/aspergillus/geneindex.html>), region homologous with *S. pombe* U2AF<sup>35</sup>, *S. pombe* (AC#Q09176), *H. sapiens* (AC#Q01081), and *C. neoformans*, B3501 serotype D (locus162.m02737 <http://www.tigr.or/tdb/e2k1/cna1>). *S. cerevisiae* does not have a U2AF<sup>35</sup> equivalent [Abovich, 1997 #83]. The RRM domain is in a dashed box, the Zn finger regions are enclosed in the dotted boxes, and the KOG2202 domain characteristic for the small U2AF subunit is in brackets.



Bracket KOG2202  
 Dashed RRM  
 Dotted Zn finger CCCH



FIG. S5. Nam8p, TIA-1 and TIAR homologs. (A) Sequence alignment of the TIA1/TIAR/NAM8 homologs in *S. pombe* (CSX1, AC# CAB16569.1), *N. crassa* (AC# NCU00768.1, XP\_328580.1), *A. nidulans* (AC# EAA61923.1, EAA66209.1), *C. neoformans*, B3501 serotype D (locus 163.m06329, <http://www.tigr.org/tdb/e2k1/cna1/>), and *H. sapiens* (AC# NP\_071505.1, A46174) as well as NAM8 (AC# Q00539), in *S. cerevisiae*. The RRM domains are enclosed by dashed boxes and KOG0148 is identified by brackets.



Bracket KOG0148  
Dashed RRM