



Supplemental Figure S5 – Annotation and quantification of AS events in human, mouse and chicken

A) Left: number of AS events of each type, including intron retention (IR, orange), cassette exons (AltEx, purple) and alternative splice site donor (Alt5, dark green) and acceptors (Alt3, light green) in human (top), mouse (middle) and chicken (bottom). Center: number of AltEx events by number of contiguous alternative exons; most events consist of a single exon. Right: number of alternative exons, by length class. B) Percent of AS events in VastDB by type that are annotated in current Ensembl releases (black) or identified *de novo* (grey) by *vast-tools* for each species. IR is not shown, as all introns profiled by *vast-tools* are annotated by definition. C) Example of a tissue-regulated alternative exon of 34 nt in *Ptbp2*. RT-PCR and RNA-seq data show that the exon has the highest inclusion in ESCs and neural samples and the lowest in spleen. Bottom: Mapping of the alternative (A) and neighboring (C1 and C2) exons with respect to protein domains and disordered regions (grey), as well as in the protein structure. D) High correlation for human (red), mouse (green) and chicken (blue) PSI estimates from RT-PCR and VastDB RNA-seq data using independent RNA samples.