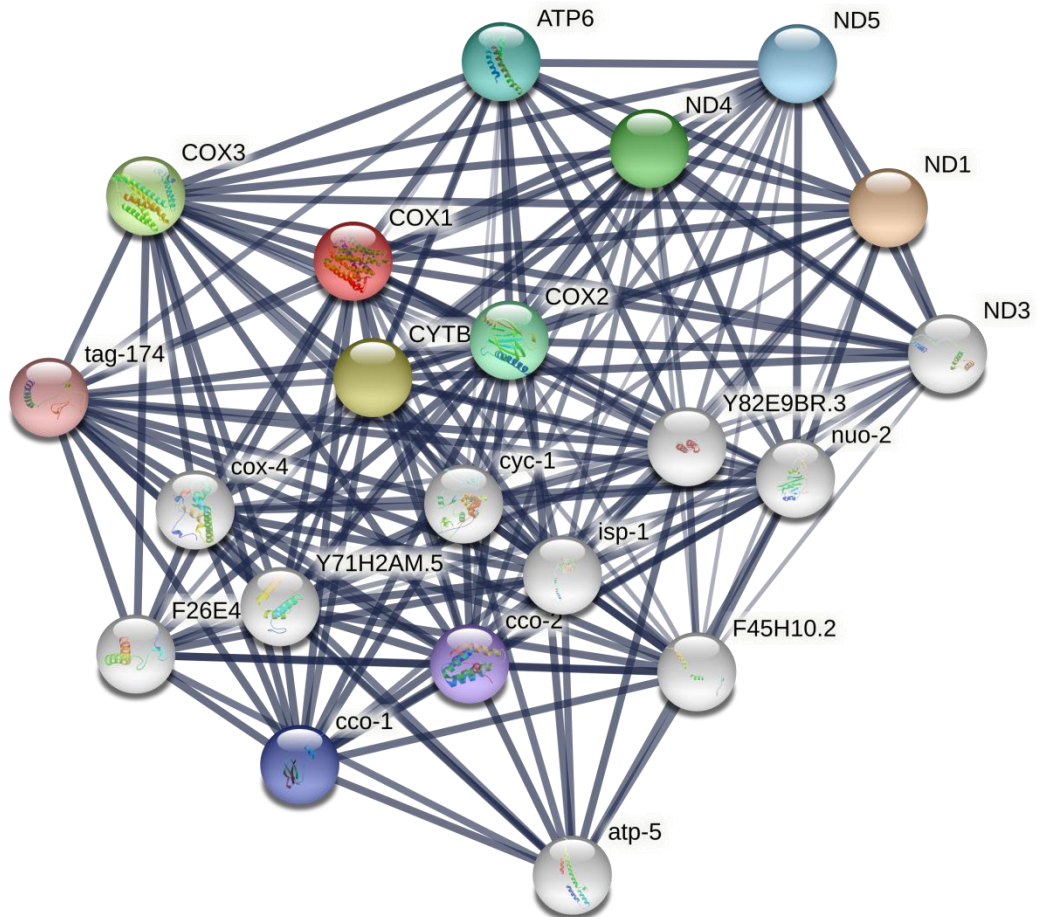
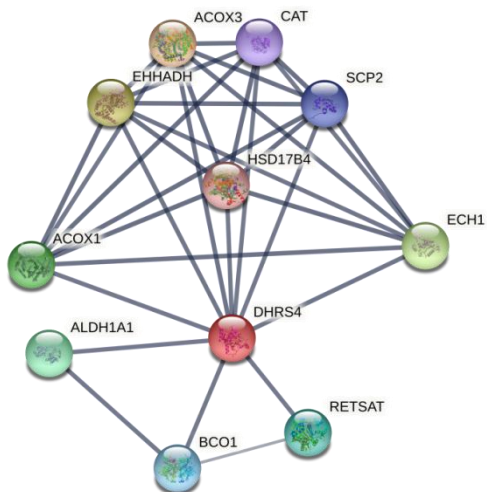


Fig. S1 Hub gene networks.

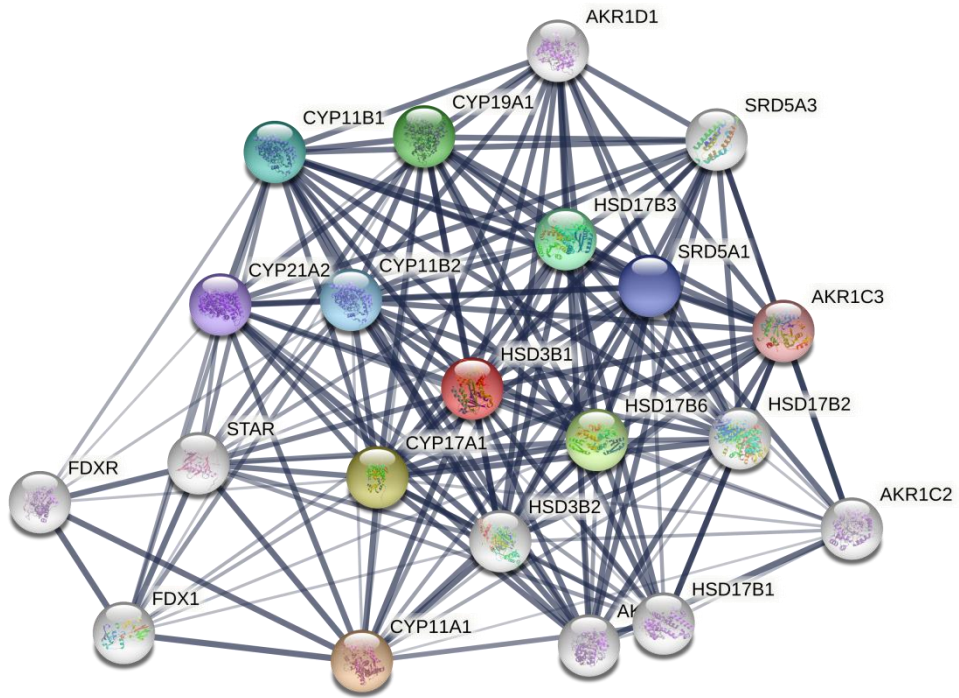
The relationship of candidate gene, *COX1* and *COX3*, with other genes



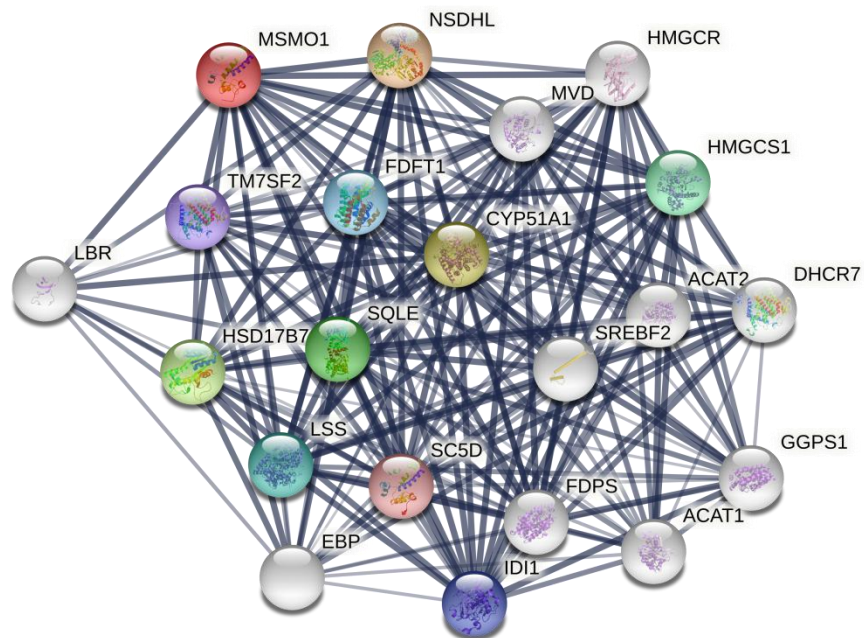
The relationship of candidate gene, *DHRS4*, with other genes



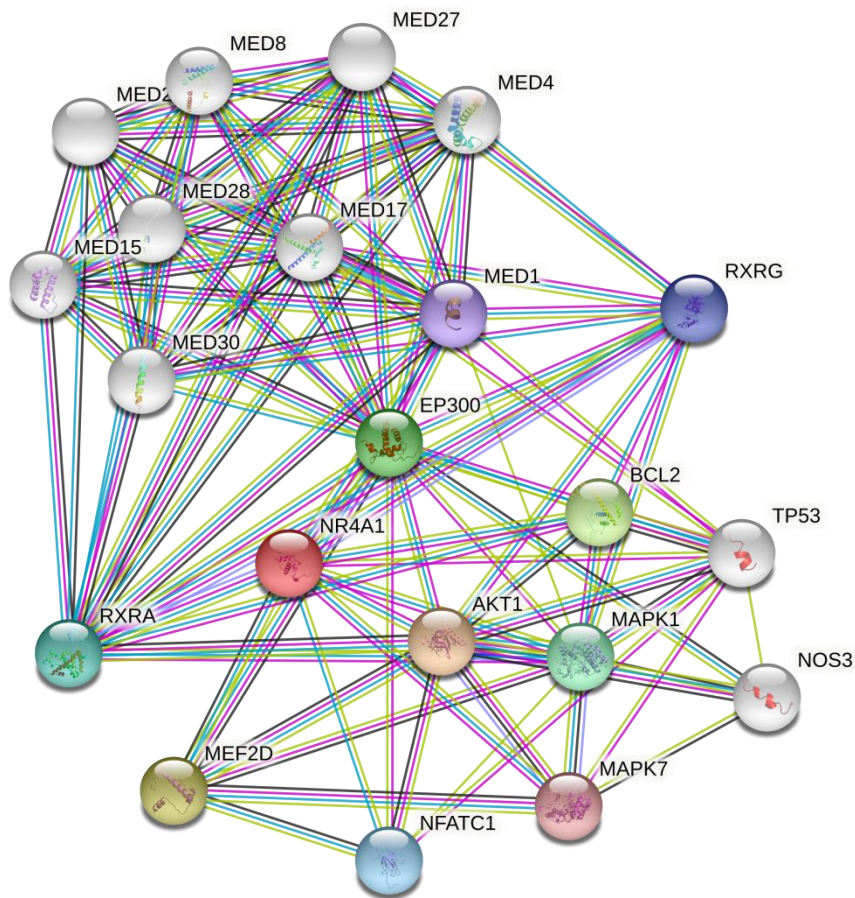
The relationship of candidate gene, *HSD3B*, with other genes



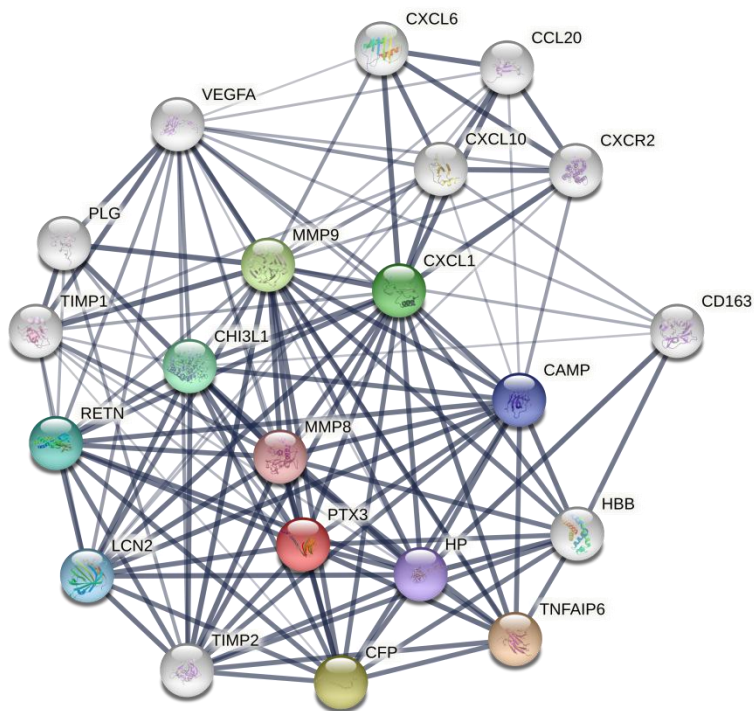
The relationship of candidate gene, *MSMO1*, with other genes



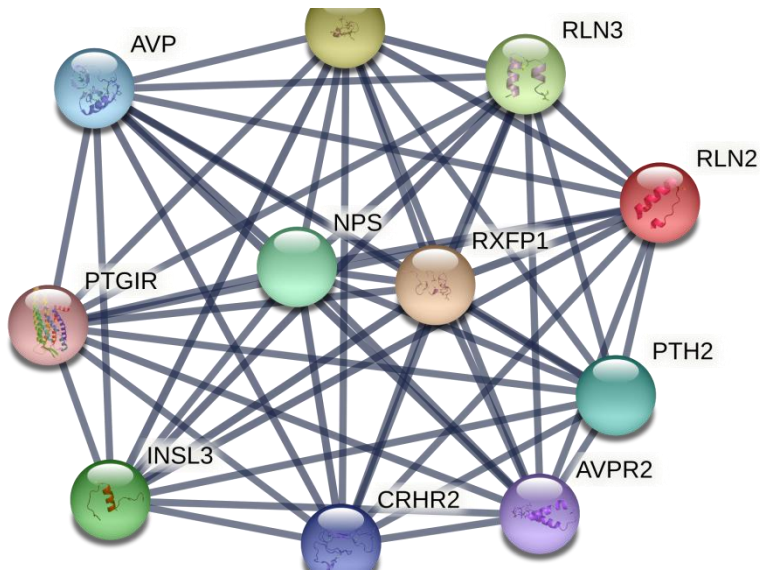
The relationship of candidate gene, *NR4A1*, with other genes



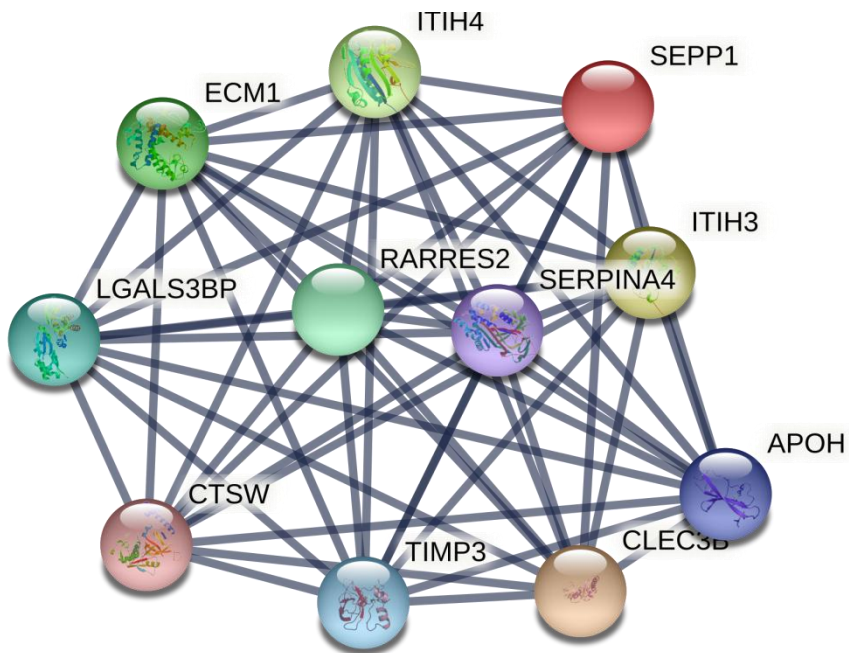
The relationship of candidate gene, *PTX3*, with other genes



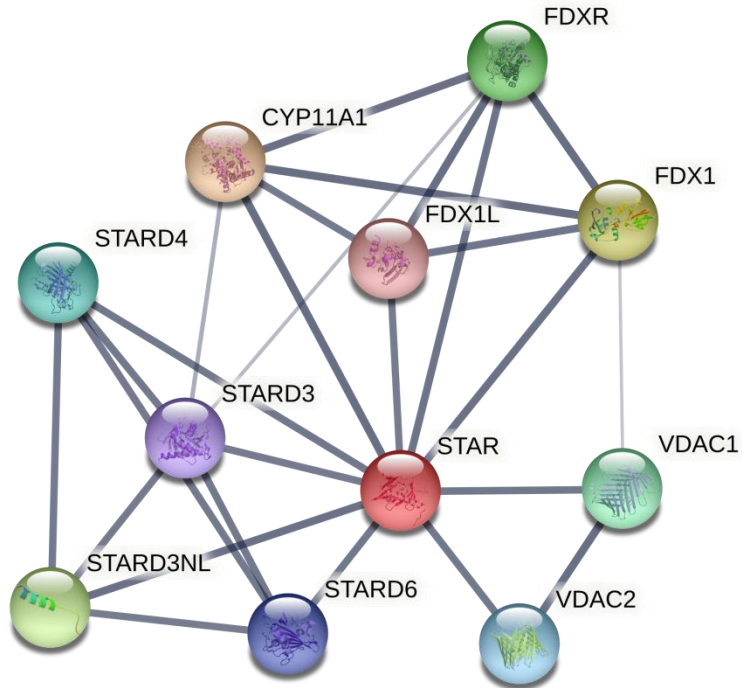
The relationship of candidate gene, *RLN2*, with other genes



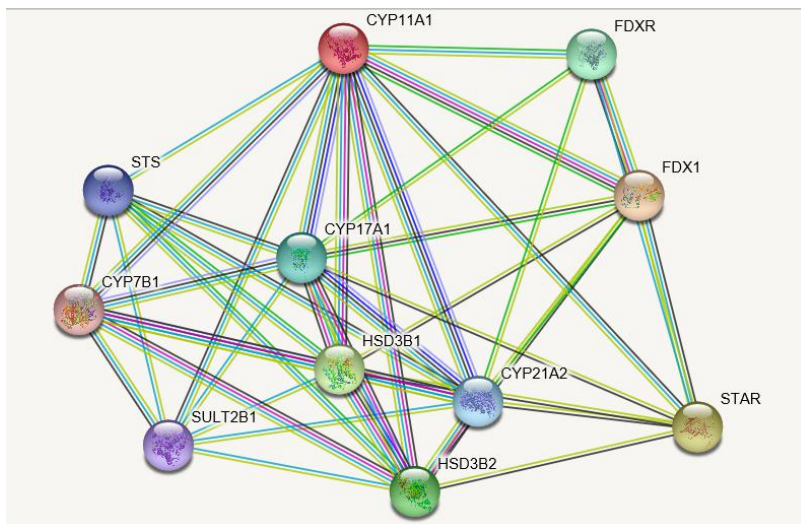
The relationship of candidate gene, *SELENOP*, with other genes



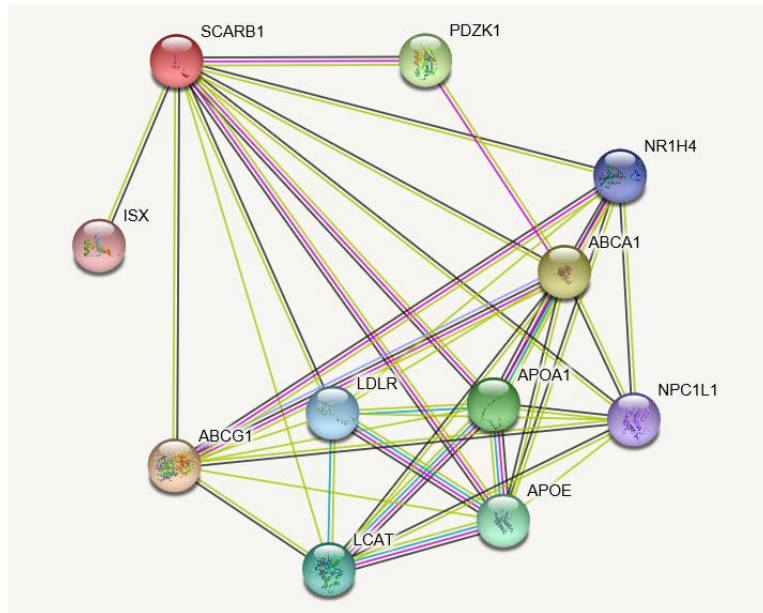
The relationship of candidate gene, *STAR*, with other genes



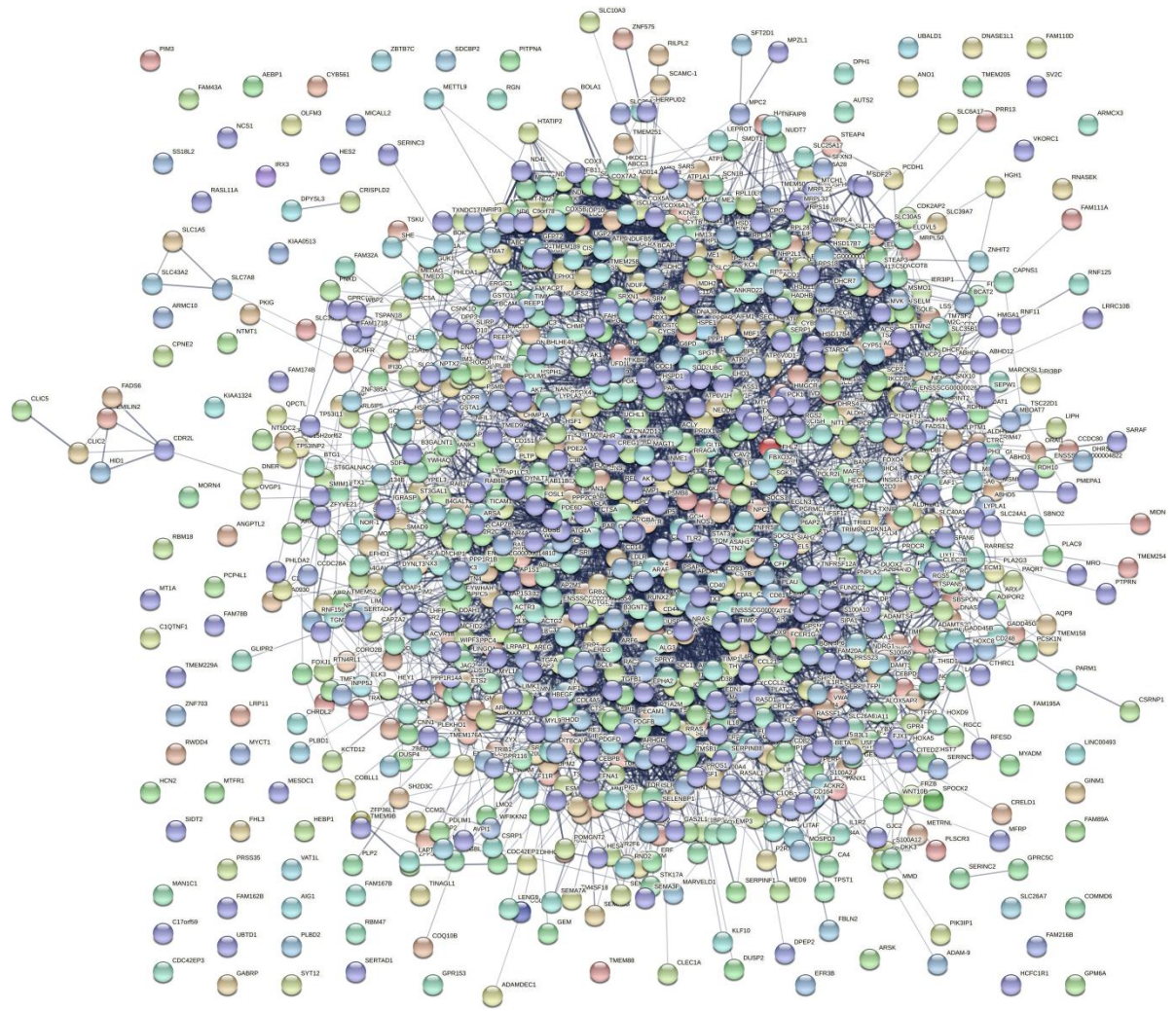
The relationship of candidate gene, *CYP11A1*, with other genes



The relationship of candidate gene, *SCARB1*, with other genes



The hub genes for up-regulated DEGs



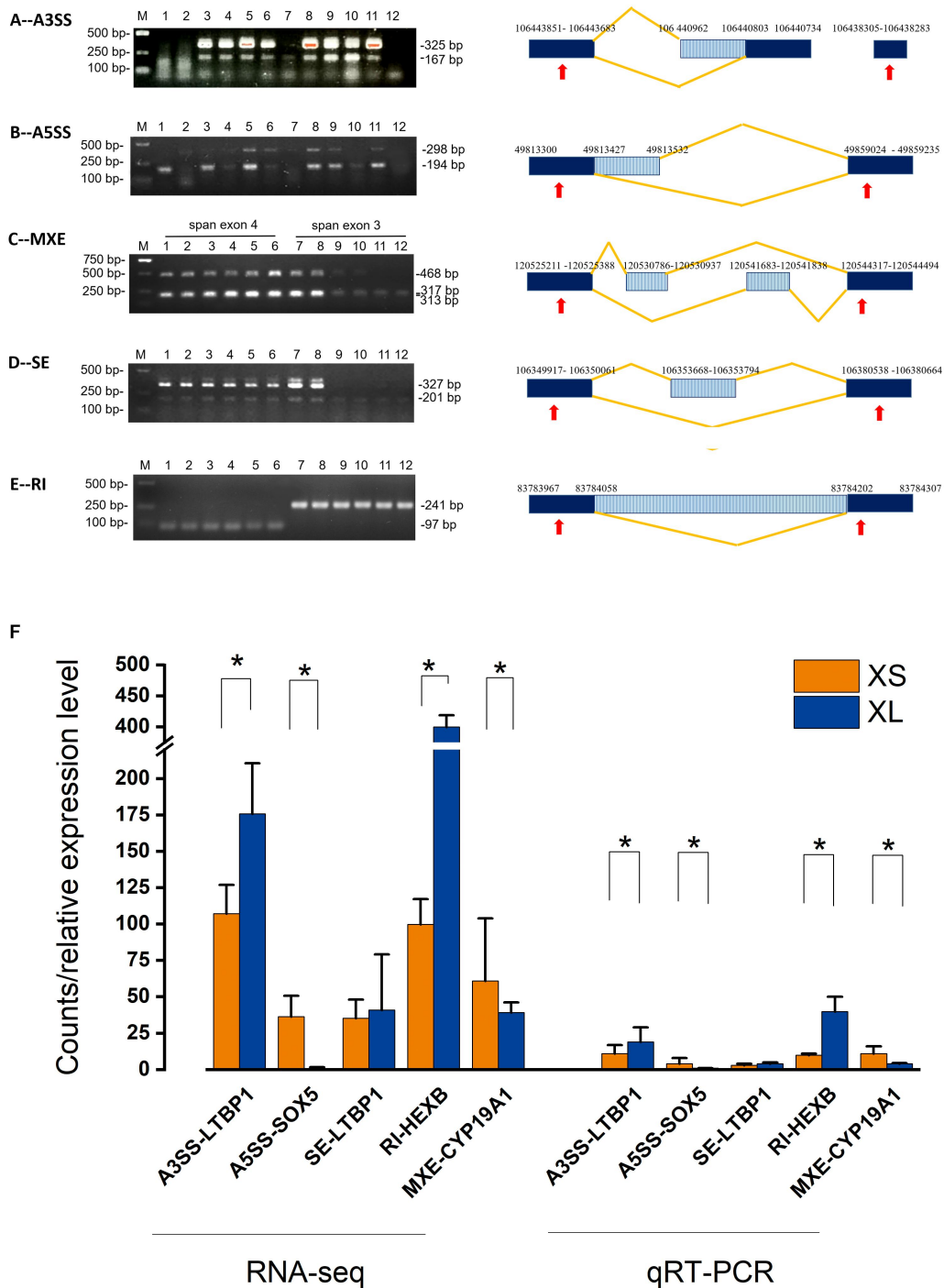


Fig. S2 Confirmation of five types AS events by RT-PCR and qRT-PCR methods.

The five types AS events were verified by RT-PCR method taking the specific primers outside of AS region (panel A to E), which were detected by 2.5% agarose gel. Diagram of AS types and event locations were arranged on the right. The positions of specific primer were indicated under the exon box in red arrows. Lane 1-6: samples from XS group; Lane 7-12: samples from XL group. A: The A3SS event in exon13 of *LTBP1* were detected with the band of 167 bp in length. B: The band with 194 bp in length showed the A5SS event in exon7 of *SOX5* transcript. C: Fragments with 313/317 bp in length were the MXE event spanned exon3 (151 bp) or exon4 (155 bp) of *CYP19A1*. D: The band in 201 bp denoted the SE event spanned exon27 (126 bp) of *LTBP1*. E: The band (241 bp) showed RI event retained in intron 12 (144 bp) of *HEXB*. F: The expression level of gene transcripts contained AS events were determined by qRT-PCR with one of primer spanned the junction of AS event listed in Table S1.