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Type 2A phosphatases are part of the PPP subfamily that is formed by PP2A, PP4 and PP6, which are the mammalian orthologues of yeast Pph21/22, Pph3 and Sit4, respectively. These phosphatases share the $\alpha 4$ protein as a common regulator. We have recently shown that TIPRL, the mammalian orthologue of yeast Tip41, interacts directly with the catalytic subunits of type 2A phosphatases and also with the transcription factors MafB and TAF10. In this study, we established stable HEK293 cell lines with altered expression of TIPRL and searched for differentially phosphorylated proteins. Phosphoproteins from TIPRL overexpressing cells and negative control cells, transfected with empty vector, were purified using a commercial system and separated by SDS-PAGE. Two differentially phosphorylated proteins migrating at approximately 32 kDa were identified by LC MS/MS as the splicing factor SF2/ASF and its regulatory protein SF2p32. SF2/ASF contains serine rich (SR) and RNA recognition motif (RRM) domains and regulates alternative splicing and translation initiation. These findings indicate a novel role for TIPRL in gene expression control.

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