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RBM35A Antibody

Catalog # ASC11283

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q6NXG1
Other Accession	NP_001030087, 56790297
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	75585
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	RBM35A antibody can be used for detection of RBM35A by Western blot at 0.5 g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	54845
Other Names	Epithelial splicing regulatory protein 1, RNA-binding motif protein 35A, RNA-binding protein 35A, ESRP1, RBM35A
Target/Specificity	ESRP1; RBM35A antibody is predicted to not cross-react with other RBM35/ESRP family members. At least five isoforms of RBM35A are known to exist; this antibody will detect all five.
Reconstitution & Storage	RBM35A antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	RBM35A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ESRP1
Synonyms	RBM35A
Function	mRNA splicing factor that regulates the formation of epithelial cell-specific isoforms. Specifically regulates the expression of FGFR2-IIIb, an epithelial cell-specific isoform of FGFR2. Also regulates the splicing of CD44, CTNND1, ENAH, 3 transcripts that undergo changes in splicing during the epithelial-to-mesenchymal transition (EMT). Acts by directly binding specific

sequences in mRNAs. Binds the GU-rich sequence motifs in the ISE/ISS-3, a cis-element regulatory region present in the mRNA of FGFR2 (PubMed:19285943). Regulates splicing and expression of genes involved in inner ear development, auditory hair cell differentiation, and cell fate specification in the cochlear epithelium (By similarity).

Cellular Location Nucleus.

Tissue Location Epithelial cell-specific.

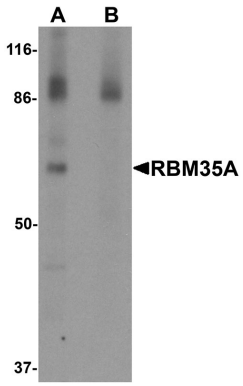
Background

RBM35A Antibody: RBM35A, also known as ESRP1, is a mRNA splicing factor that with its related protein RBM35B (ESRP2) are coordinators of an epithelial cell-type-specific splicing program. RBM35A contains three putative RNA recognition motifs and acts by directly binding specific sequences in mRNAs. RBM35A is involved in posttranscriptional regulation of a number of genes such as FGFR2, CD44, CTNND1, and ENAH by exerting a differential effect on protein translation via 5' UTRs of mRNAs. Other recent studies have shown that RMB35A may also act as a novel tumor suppressor.

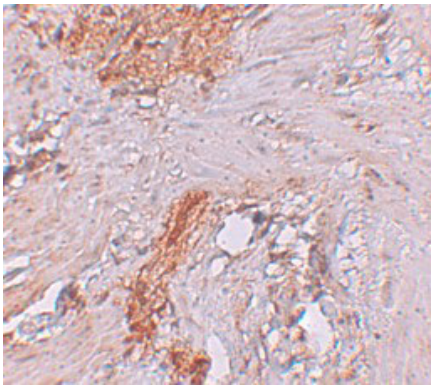
References

Warzecha CC, Jiang P, Amirikian K, et al. An ESRP-regulated splicing programme is abrogated during the epithelial-mesenchymal transition. EMBO J. 2010; 29:3286-300.
Warzecha CC, Shen S, Xing Y, et al. The epithelial splicing factors ESRP1 and ESRP2 positively and negatively regulate diverse types of alternative splicing events. RNA Biol. 2009; 6:546-62.
Leontieva OV and Ionov Y. RNA-binding motif protein 35A is a novel tumor suppressor for colorectal cancer. Cell Cycle 2009; 8:490-7.
Leontieva OV and Ionov Y. RNA-binding motif protein 35A is a novel tumor suppressor for colorectal cancer. Cell Cycle 2009; 8:490-7.

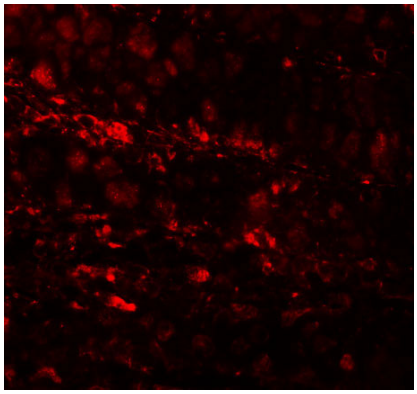
Images



Western blot analysis of RBM35A in rat colon tissue lysate with RBM35A antibody at 0.5 µg/mL in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of RBM35A in human colon tissue with RBM35A antibody at 2.5 µg/mL.



Immunofluorescence of RBM35A in human colon tissue cells with RBM35A antibody at 20 µg/mL.