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PUF60 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14370a

Product Information

Application	WB, E
Primary Accession	Q9UHX1
Other Accession	NP_510965.1, NP_055096.2, NP_001129505.1
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34229
Calculated MW	59875
Antigen Region	15-43

Additional Information

Gene ID	22827
Other Names	Poly(U)-binding-splicing factor PUF60, 60 kDa poly(U)-binding-splicing factor, FUSE-binding protein-interacting repressor, FBP-interacting repressor, Ro-binding protein 1, RoBP1, Siah-binding protein 1, Siah-BP1, PUF60, FIR, ROBPI, SIAHBP1
Target/Specificity	This PUF60 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 15-43 amino acids from the N-terminal region of human PUF60.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PUF60 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PUF60 (HGNC:17042)

Function	DNA- and RNA-binding protein, involved in several nuclear processes such as pre-mRNA splicing, apoptosis and transcription regulation. In association with FUBP1 regulates MYC transcription at the P2 promoter through the core-TFIIH basal transcription factor. Acts as a transcriptional repressor through the core-TFIIH basal transcription factor. Represses FUBP1-induced transcriptional activation but not basal transcription. Decreases ERCC3 helicase activity. Does not repress TFIIH-mediated transcription in xeroderma pigmentosum complementation group B (XPB) cells. Is also involved in pre-mRNA splicing. Promotes splicing of an intron with weak 3'-splice site and pyrimidine tract in a cooperative manner with U2AF2. Involved in apoptosis induction when overexpressed in HeLa cells. Isoform 6 failed to repress MYC transcription and inhibited FIR-induced apoptosis in colorectal cancer. Isoform 6 may contribute to tumor progression by enabling increased MYC expression and greater resistance to apoptosis in tumors than in normal cells. Modulates alternative splicing of several mRNAs. Binds to relaxed DNA of active promoter regions. Binds to the pyrimidine tract and 3'-splice site regions of pre-mRNA; binding is enhanced in presence of U2AF2. Binds to Y5 RNA in association with RO60. Binds to poly(U) RNA.
Cellular Location	Nucleus Note=Colocalizes partially with RO60.
Tissue Location	Isoform 2 is expressed in colonic epithelium and colorectal epithelium cancer (at protein level). Isoform 6 is expressed in colorectal epithelial cancer but below detection level in colonic epithelium. Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney, pancreas, spleen, thymus, prostate, testis, ovary, small intestine, colon and peripheral blood leukocytes

Background

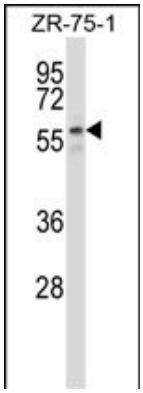
The protein encoded by this gene is a Ro RNP-binding protein. It interacts with Ro RNPs and their interaction is thought to represent a gain of function for Ro RNPs. This protein also forms a ternary complex with far upstream element (FUSE) and FUSE-binding protein. It can repress a c-myc reporter via the FUSE. It is also known to target transcription factor IIH and inhibit activated transcription. This gene is implicated in the xeroderma pigmentosum disorder. There are two alternatively spliced transcript variants of this gene encoding different isoforms. There seems to be evidence of multiple polyadenylation sites for this gene.

References

Hsiao, H.H., et al. Biochemistry 49(22):4620-4634(2010)
Corsini, L., et al. J. Biol. Chem. 284(1):630-639(2009)
Gao, J., et al. Genomics 91(4):347-355(2008)
Hastings, M.L., et al. PLoS ONE 2 (6), E538 (2007) :
Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :

Images

PUF60 Antibody (N-term) (Cat. #AP14370a) western blot analysis in ZR-75-1 cell line lysates (35ug/lane).This demonstrates the PUF60 antibody detected the PUF60 protein (arrow).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.