

PUF60 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14370a

Specification

PUF60 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>O9UHX1</u> NP_510965.1, NP_055096.2, NP_001129505.1 Human Rabbit Polyclonal Rabbit IgG 59875 15-43

PUF60 Antibody (N-term) - 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.

PUF60 Antibody (N-term) - Protein Information

Name PUF60 (<u>HGNC:17042</u>)



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. 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

PUF60 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

PUF60 Antibody (N-term) - 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).

PUF60 Antibody (N-term) - 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.

PUF60 Antibody (N-term) - 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) :