

## **PUF60 Antibody (N-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14370a

### **Specification**

### PUF60 Antibody (N-term) - Product Information

Application WB,E
Primary Accession Q9UHX1

Other Accession NP 510965.1, NP 055096.2, NP 001129505.1

Reactivity
Human
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region
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

### **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 (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

#### **Cellular Location**

Binds to poly(U) RNA.

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

DNA of active promoter regions. Binds to the pyrimidine tract and 3'-splice site regions of

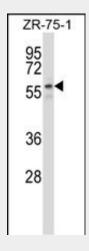
pre-mRNA; binding is enhanced in presence of U2AF2. Binds to Y5 RNA in association with RO60.

## PUF60 Antibody (N-term) - Protocols

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

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

### 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) :