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PURB Rabbit pAb

Catalog # AP98276

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q96QR8
Other Accession	Q96QR8
Reactivity	Rat, Human, Mouse
Predicted	Rabbit, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33241
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PURB
Epitope Specificity	201-312/312
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	Preservative: 0.02% Proclin300, Constituents: 1% BSA, 0.01M PBS, pH7.4.
SIMILARITY	Belongs to the PUR DNA-binding protein family.
SUBUNIT	Homodimer, heterodimer with PURA and heterotrimer with PURA and YBX1/Y-box protein 1.
Post-translational modifications	Phosphorylated upon DNA damage, probably by ATM or ATR.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene product is a sequence-specific, single-stranded DNA-binding protein. It binds preferentially to the single strand of the purine-rich element termed PUR, which is present at origins of replication and in gene flanking regions in a variety of eukaryotes from yeasts through humans. Thus, it is implicated in the control of both DNA replication and transcription. Deletion of this gene has been associated with myelodysplastic syndrome and acute myelogenous leukemia. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	5814
Other Names	PURBETA; 2310015K15Rik; Cager-2; D11Bwg0414e; PURB_HUMAN; PURB; Purine-rich element-binding protein B; PURB_MOUSE; Vascular actin single-stranded DNA-binding factor 2 p44 component; purine rich element binding protein B
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name	PURB
Function	Transcriptional regulator which can act as an activator or a repressor. Represses the transcription of ACTA2 in fibroblasts and smooth muscle cells via its ability to interact with the purine-rich strand of a MCAT- containing element in the 5' flanking region of the gene. Represses the transcription of MYOCD, capable of repressing all isoforms of MYOCD but the magnitude of the repressive effects is most notable for the SMC- specific isoforms. Promotes hepatic glucose production by activating the transcription of ADCY6, leading to cAMP accumulation, increased PKA activity, CREB activation, and increased transcription of PCK1 and G6PC genes (By similarity). Has capacity to bind repeated elements in single-stranded DNA such as the purine-rich single strand of the PUR element located upstream of the MYC gene (PubMed:1448097). Participates in transcriptional and translational regulation of alpha-MHC expression in cardiac myocytes by binding to the purine-rich negative regulatory (PNR) element Modulates constitutive liver galectin-3 gene transcription by binding to its promoter. May play a role in the dendritic transport of a subset of mRNAs (By similarity).
Cellular Location	Nucleus.
Tissue Location	Expressed in myocardium of heart failure patients.

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