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PURB Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12051B

Product Information

Application	WB, IF, FC, E
Primary Accession	Q96QR8
Other Accession	Q68A21, O35295, NP_150093.1
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32000
Calculated MW	33241
Antigen Region	260-289

Additional Information

Gene ID	5814
Other Names	Transcriptional activator protein Pur-beta, Purine-rich element-binding protein B, PURB
Target/Specificity	This PURB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 260-289 amino acids from the C-terminal region of human PURB.
Dilution	WB~~1:1000 IF~~1:10~50 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	PURB Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

Background

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.

References

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Ramsey, J.E., et al. Biochemistry 48(27):6348-6360(2009)
Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007)
Olsen, J.V., et al. Cell 127(3):635-648(2006)
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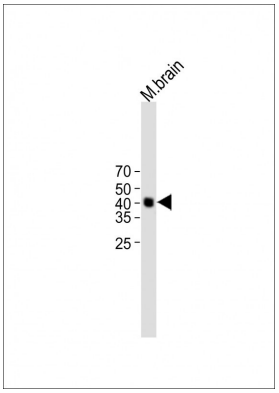
Images



All lanes : Anti-PURB Antibody (C-term) at 1:1000 dilution Lane 1 : Mouse brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 40kDa Blocking/Dilution buffer : 5% NFDM/TBST.