

PURB Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12051B

Specification

PURB Antibody (C-term) - Product Information

Application WB, IF, FC,E
Primary Accession Q96QR8

Other Accession <u>Q68A21</u>, <u>Q35295</u>, <u>NP 150093.1</u>

Reactivity
Predicted
Host
Clonality
Isotype
Antigen Region

Human
Mouse, Rat
Rabbit
Polyclonal
Rabbit IgG
Action 260-289

PURB Antibody (C-term) - 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 0.09% (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

PURB Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PURB Antibody (C-term) - 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

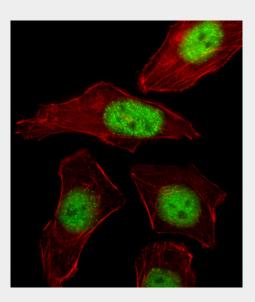
Expressed in myocardium of heart failure patients.

PURB Antibody (C-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 Cvtometv
- Cell Culture

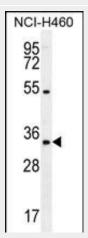
PURB Antibody (C-term) - Images



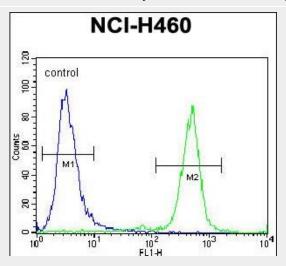
Fluorescent image of A549 cell stained with PURB Antibody (C-term)(Cat#AP12051b).A549 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated



with PURB primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C). Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37° C). PURB immunoreactivity is localized to Nucleus significantly.



PURB Antibody (C-term) (Cat. #AP12051b) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the PURB antibody detected the PURB protein (arrow).



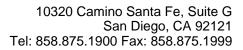
PURB Antibody (C-term) (Cat. #AP12051b) flow cytometric analysis of NCI-H460 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

PURB Antibody (C-term) - 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.

PURB Antibody (C-term) - References

Joslyn, G., et al. Alcohol. Clin. Exp. Res. 34(5):800-812(2010) 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) Olsen, J.V., et al. Cell 127(3):635-648(2006)