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ITGB4BP Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP2907c

Specification

ITGB4BP Antibody (Center) Blocking Peptide - Product Information

Primary Accession P56537

ITGB4BP Antibody (Center) Blocking Peptide - Additional Information

Gene ID 3692

Other Names
Eukaryotic translation initiation factor 6 {ECO:0000255|HAMAP-Rule:MF_03132}, eIF-6 {ECO:0000255|HAMAP-Rule:MF_03132}, B(2)GCN homolog, B4 integrin interactor, CAB, p27(BBP), EIF6 {ECO:0000255|HAMAP-Rule:MF_03132}

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP2907c was selected from the Center region of human ITGB4BP. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ITGB4BP Antibody (Center) Blocking Peptide - Protein Information

Name EIF6 {ECO:0000255|HAMAP-Rule:MF_03132, ECO:0000312|HGNC:HGNC:6159}

Function
Binds to the 60S ribosomal subunit and prevents its association with the 40S ribosomal subunit to form the 80S initiation complex in the cytoplasm (PubMed:10085284, PubMed:14654845, PubMed:21536732, PubMed:32669547). Behaves as a stimulatory translation initiation factor downstream insulin/growth factors. Is also involved in ribosome biogenesis. Associates with pre-60S subunits in the nucleus and is involved in its nuclear export. Cytoplasmic release of TIF6 from 60S subunits and nuclear relocalization is promoted by a RACK1 (RACK1)- dependent protein kinase C activity (PubMed:<a

href="http://www.uniprot.org/citations/10085284" target="_blank">10085284, PubMed:14654845, PubMed:21536732). In tissues responsive to insulin, controls fatty acid synthesis and glycolysis by exerting translational control of adipogenic transcription factors such as CEBPB, CEBPD and ATF4 that have G/C rich or uORF in their 5'UTR. Required for ROS-dependent megakaryocyte maturation and platelets formation, controls the expression of mitochondrial respiratory chain genes involved in reactive oxygen species (ROS) synthesis (By similarity). Involved in miRNA-mediated gene silencing by the RNA-induced silencing complex (RISC). Required for both miRNA-mediated translational repression and miRNA-mediated cleavage of complementary mRNAs by RISC (PubMed:17507929). Modulates cell cycle progression and global translation of pre-B cells, its activation seems to be rate-limiting in tumorigenesis and tumor growth (By similarity).

Cellular Location
Cytoplasm. Nucleus, nucleolus. Note=Shuttles between cytoplasm and nucleus/nucleolus

Tissue Location
Expressed at very high levels in colon carcinoma with lower levels in normal colon and ileum and lowest levels in kidney and muscle (at protein level).

ITGB4BP Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

ITGB4BP Antibody (Center) Blocking Peptide - Images

ITGB4BP Antibody (Center) Blocking Peptide - Background

ITGB4BP binds to the fibronectin type III domains of ITGB4 and may help link ITGB4 to the intermediate filament cytoskeleton. This protein, which is insoluble and found both in the nucleus and in the cytoplasm, can function as a translation initiation factor and prevent the association of the 40S and 60S ribosomal subunits.

ITGB4BP Antibody (Center) Blocking Peptide - References

Flavin,R.J., et.al., Mod. Pathol. 21 (6), 676-684 (2008)