

#### **IGFBP5 Antibody (Center)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21963c

### Specification

# IGFBP5 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	<u>P24593</u>
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	30570

## **IGFBP5** Antibody (Center) - Additional Information

#### Gene ID 3488

**Other Names** Insulin-like growth factor-binding protein 5, IBP-5, IGF-binding protein 5, IGFBP-5, IGFBP5, IBP5

Target/Specificity

This IGFBP5 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 87-121 amino acids from the Central region of human IGFBP5.

Dilution

WB~~1:2000

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

IGFBP5 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# IGFBP5 Antibody (Center) - Protein Information

Name IGFBP5

Synonyms IBP5

Function Multifunctional protein that plays a critical role in regulating the availability of IGFs to



their receptors and thereby regulates IGF-mediated cellular processes including proliferation, differentiation, and apoptosis in a cell-type specific manner (PubMed:<u>18930415</u>, PubMed:<u>7683690</u>). Increases the cell proliferation of osteoblasts, intestinal smooth muscle cells and neuroblastoma cells. Enhances adhesion and survival of epithelial cells but decreases adhesion of mesenchymal cells (By similarity). Once secreted, acts as a major mediator of mTORC1-dependent feedback inhibition of IGF1 signaling (By similarity). Also plays a role in the induction of extracellular matrix (ECM) production and deposition independently of its nuclear translocation and binding to IGFs (PubMed:<u>20345844</u>, PubMed:<u>26103640</u>). Acts itself as a growth factor that can act independently of IGFs to regulate bone formation. Acts as a ligand for the ROR1 receptor which triggers formation of ROR1/HER2 heterodimer to enhance CREB oncogenic signaling (PubMed:<u>36949068</u>).

Cellular Location Secreted. Cytoplasm. Nucleus

**Tissue Location** Osteosarcoma, and at lower levels in liver, kidney and brain

# **IGFBP5** Antibody (Center) - Protocols

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

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

## IGFBP5 Antibody (Center) - Images



Anti-IGFBP5 Antibody (Center) at 1:2000 dilution + SK-OV-3 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 31 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

#### IGFBP5 Antibody (Center) - Background



IGF-binding proteins prolong the half-life of the IGFs and have been shown to either inhibit or stimulate the growth promoting effects of the IGFs on cell culture. They alter the interaction of IGFs with their cell surface receptors.

## **IGFBP5 Antibody (Center) - References**

Kiefer M.C., et al.Biochem. Biophys. Res. Commun. 176:219-225(1991). Shimasaki S., et al.J. Biol. Chem. 266:10646-10653(1991). Allander S.V., et al.J. Biol. Chem. 269:10891-10898(1994). Yu W., et al.Submitted (MAR-1998) to the EMBL/GenBank/DDBJ databases. Kalnine N., et al.Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.