

IGFBP2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8588B

Specification

IGFBP2 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Antigen Region FC, IF, IHC-P, WB,E <u>P18065</u> <u>P24853</u>, <u>P13384</u>, <u>O29400</u> Human Bovine, Pig, Sheep Rabbit Polyclonal Rabbit IgG 277-305

IGFBP2 Antibody (C-term) - Additional Information

Gene ID 3485

Other Names Insulin-like growth factor-binding protein 2, IBP-2, IGF-binding protein 2, IGFBP-2, IGFBP2, BP2, IBP2

Target/Specificity

This IGFBP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 277-305 amino acids from the C-terminal region of human IGFBP2.

Dilution $FC \sim 1:10 \sim 50$ $IF \sim 1:10 \sim 50$ $IHC \cdot P \sim 1:10 \sim 50$ $WB \sim 1:1000$ $E \sim -$ 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

IGFBP2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

IGFBP2 Antibody (C-term) - Protein Information



Name IGFBP2

Synonyms BP2, IBP2

Function Multifunctional protein that plays a critical role in regulating the availability of IGFs such as IGF1 and IGF2 to their receptors and thereby regulates IGF-mediated cellular processes including proliferation, differentiation, and apoptosis in a cell-type specific manner (PubMed:<u>18563800</u>, PubMed:<u>38796567</u>). Functions coordinately with receptor protein tyrosine phosphatase beta/PTPRB and the IGF1 receptor to regulate IGF1-mediated signaling by stimulating the phosphorylation of PTEN leading to its inactivation and AKT1 activation (PubMed:<u>22869525</u>). Plays a positive role in cell migration via interaction with integrin alpha5/ITGA5 through an RGD motif (PubMed:<u>16569642</u>). Additionally, interaction with ITGA5/ITGB1 enhances the adhesion of endothelial progenitor cells to endothelial cells (PubMed:<u>26076738</u>). Upon mitochondrial damage, facilitates apoptosis with ITGA5 of podocytes, and then activates the phosphorylation of focal adhesion kinase (FAK)-mediated mitochondrial injury (PubMed:<u>38796567</u>).

Cellular Location Secreted

IGFBP2 Antibody (C-term) - Protocols

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

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

IGFBP2 Antibody (C-term) - Images



Confocal immunofluorescent analysis of IGFBP2 Antibody (C-term)(Cat. #AP8588b) with A549 cell followed by Alexa Fluor[]?488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).





Anti-IGFBP2 Antibody (C-term) at 1:1000 dilution + T47D whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 35 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human brain tissue with IGFBP2 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





Flow cytometric analysis of jurkat cells using IGFBP2 Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

IGFBP2 Antibody (C-term) - Background

IGFBP2-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.

IGFBP2 Antibody (C-term) - References

Arafat,A.M.,et.al.,J. Clin. Endocrinol. Metab. 94 (12), 5093-5101 (2009) Yazawa,T.,et.al.,Am. J. Pathol. 175 (3), 976-987 (2009)