

Anti-IGFBP2 Picoband Antibody
Catalog # ABO12291**Specification****Anti-IGFBP2 Picoband Antibody - Product Information**

Application	WB
Primary Accession	P18065
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Insulin-like growth factor-binding protein 2(IGFBP2) detection.
Tested with WB in Human;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-IGFBP2 Picoband Antibody - 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

Calculated MW

34814 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Rat

Subcellular Localization

Secreted.

Protein Name

Insulin-like growth factor-binding protein 2

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human IGFBP2 (228-257aa QQELDQVLERISTMRLPDERGPLEHLYSLH), different from the related mouse and rat sequences by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Contains 1 IGFBP N-terminal domain.

Anti-IGFBP2 Picoband Antibody - 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:18563800, PubMed:38796567). 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:22869525). Plays a positive role in cell migration via interaction with integrin alpha5/ITGA5 through an RGD motif (PubMed:16569642). Additionally, interaction with ITGA5/ITGB1 enhances the adhesion of endothelial progenitor cells to endothelial cells (PubMed:26076738). Upon mitochondrial damage, facilitates apoptosis with ITGA5 of podocytes, and then activates the phosphorylation of focal adhesion kinase (FAK)-mediated mitochondrial injury (PubMed:38796567).

Cellular Location

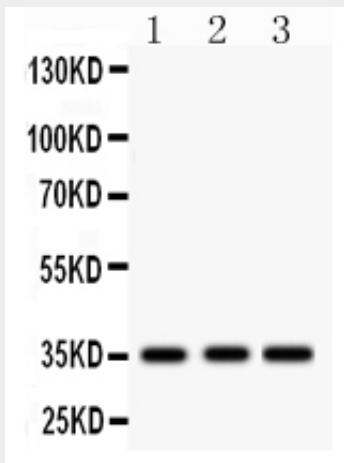
Secreted

Anti-IGFBP2 Picoband Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-IGFBP2 Picoband Antibody - Images



Anti- IGFBP2 Picoband antibody, ABO12291, Western blotting
All lanes: Anti IGFBP2 (ABO12291) at 0.5ug/ml
Lane 1: Rat Brain Tissue Lysate at 50ug
Lane 2: Rat Liver Tissue Lysate at 50ug
Lane 3: Human Placenta Tissue Lysate at 50ug
Predicted bind size: 35KD
Observed bind size: 35KD

Anti-IGFBP2 Picoband Antibody - Background

The superfamily of insulin-like growth factor (IGF) binding proteins include the six high-affinity IGF binding proteins (IGFBP) and at least four additional low-affinity binding proteins referred to as IGFBP related proteins (IGFBP-rP). All IGFBP superfamily members are cysteine-rich proteins with conserved cysteine residues, which are clustered in the amino- and carboxy-terminal thirds of the molecule. IGFBPs modulate the biological activities of IGF proteins. Some IGFBPs may also have intrinsic bioactivity that is independent of their ability to bind IGF proteins. Post-translational modifications of IGFBPs, including glycosylation, phosphorylation and proteolysis, have been shown to modify the affinities of the binding proteins to IGF. Human IGFBP-2 cDNA encodes a 328 amino acid (aa) residue precursor protein with a putative 39 aa residue signal peptide that is processed to generate the 289 aa residue mature protein. IGFBP-2 contains an integrin receptor recognition sequence (RGD sequence) but lacks potential N-linked glycosylation sites. During development, IGFBP-2 is expressed in a number of tissues. The highest expression level is found in the central nervous system. In adults, high expression levels are also detected in the central nervous system and in a number of reproductive tissues. IGFBP-2 binds preferentially to IGF II, exhibiting a 2-10 fold higher affinity for IGF II than for IGF I.