

IGFBP3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7641A

Specification

IGFBP3 Antibody (N-term) - Product Information

Application IHC-P, WB,E **Primary Accession** P17936 Other Accession P15473 Reactivity Human Predicted Rat Host Rabbit **Polyclonal** Clonality Isotype Rabbit IgG Calculated MW 31674 Antigen Region 163-193

IGFBP3 Antibody (N-term) - Additional Information

Gene ID 3486

Other Names

Insulin-like growth factor-binding protein 3, IBP-3, IGF-binding protein 3, IGFBP-3, IGFBP3, IBP3

Target/Specificity

This IGFBP3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 163-193 amino acids from the N-terminal region of human IGFBP3.

Dilution

IHC-P~~1:10~50 WB~~1:1000

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 G column, followed by dialysis against PBS.

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

IGFBP3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

IGFBP3 Antibody (N-term) - Protein Information

Name IGFBP3



Synonyms IBP3

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: 10874028, PubMed: 19556345). Also exhibits IGF- independent antiproliferative and apoptotic effects mediated by its receptor TMEM219/IGFBP-3R (PubMed: 20353938). Inhibits the positive effect of humanin on insulin sensitivity (PubMed: 19623253). Promotes testicular germ cell apoptosis (PubMed: 19952275). Acts via LRP- 1/alpha2M receptor, also known as TGF-beta type V receptor, to mediate cell growth inhibition independent of IGF1 (PubMed: 9252371). Mechanistically, induces serine-specific dephosphorylation of IRS1 or IRS2 upon ligation to its receptor, leading to the inhibitory cascade (PubMed: 15371331). In the nucleus, interacts with transcription factors such as retinoid X receptor-alpha/RXRA to regulate transcriptional signaling and apoptosis (PubMed: 10874028).

Cellular LocationSecreted, Nucleus

Tissue Location

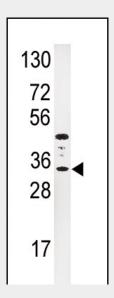
Expressed by most tissues. Present in plasma.

IGFBP3 Antibody (N-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
- Cell Culture

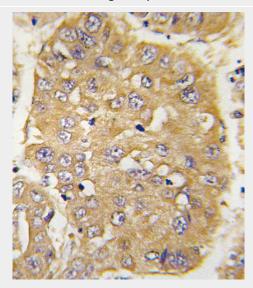
IGFBP3 Antibody (N-term) - Images



Western blot analysis of anti-IGFBP3 Antibody (N-term) (Cat. #AP7641a) in HepG2 cell line lysates



(35ug/lane). IGFBP3(arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with IGFBP3 Antibody (N-term) (Cat.#AP7641a), 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.

IGFBP3 Antibody (N-term) - Background

IGFBP3 is a member of the insulin-like growth factor binding protein (IGFBP) family with an IGFBP domain and a thyroglobulin type-I domain. The protein forms a ternary complex with insulin-like growth factor acid-labile subunit (IGFALS) and either insulin-like growth factor (IGF) I or II. In this form, it circulates in the plasma, prolonging the half-life of IGFs and altering their interaction with cell surface receptors.

IGFBP3 Antibody (N-term) - References

Muzumdar, R.H., Diabetes 55 (10), 2788-2796 (2006) Novosyadlyy, R., Growth Horm. IGF Res. 15 (5), 313-323 (2005)