10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

IGFBP3 Rabbit pAb

IGFBP3 Rabbit pAb
Catalog # AP52144

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P17936
Reactivity	Rat
Predicted	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	31674
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human IGFBP3
Epitope Specificity	186-292/292
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Secreted.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene is a member of the insulin-like growth factor binding protein (IGFBP) family and encodes a protein 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. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	3486
Other Names	Insulin-like growth factor-binding protein 3, IBP-3, IGF-binding protein 3, IGFBP-3, IGFBP3, IBP3
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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 Location	Secreted. Nucleus
Tissue Location	Expressed by most tissues. Present in plasma.

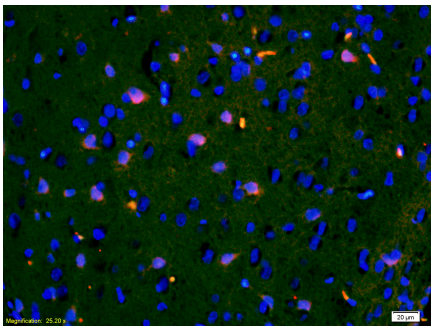
Background

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

References

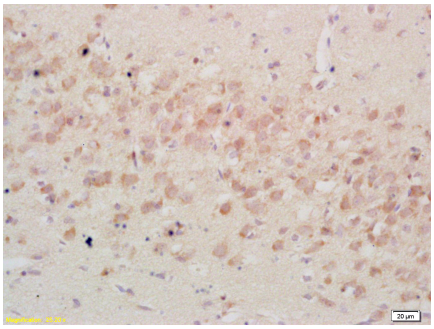
Wood W.I.,et al.Mol. Endocrinol. 2:1176-1185(1988).
Cubbage M.L.,et al.J. Biol. Chem. 265:12642-12649(1990).
Thweatt R.,et al.DNA Seq. 4:43-46(1993).
Hillier L.W.,et al.Nature 424:157-164(2003).
Scherer S.W.,et al.Science 300:767-772(2003).

Images



Tissue/cell: rat brain tissue;4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-IGFBP3 Polyclonal Antibody, Unconjugated(AP52144) 1:200, overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated(AP52144-Cy3)used at 1:200 dilution for 40 minutes at 37°C. DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei

Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling



bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-IGFBP3 Polyclonal Antibody, Unconjugated(AP52144) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.