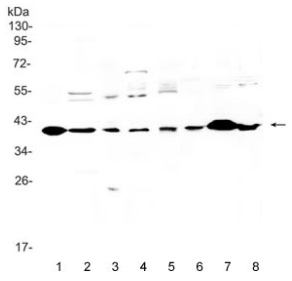
IGF Binding Protein 3 Antibody / Growth Hormone-Dependent Binding Protein Antibody (R31990)

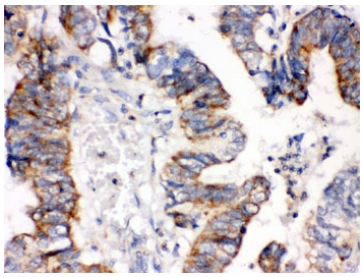
Catalog No.	Formulation	Size
R31990	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P17936
Localization	Secreted
Applications	Western blot: 0.1-0.5ug/ml IHC (FFPE): 0.5-1ug/ml ELISA: 0.1-0.5ug/ml (human protein tested); request BSA-free format for coating
Limitations	This IGF Binding Protein 3 Antibody is available for research use only.



IGF Binding Protein 3 Antibody in Human Mouse and Rat Samples WB. Western blot testing of rat heart, rat brain, rat liver, rat PC-12, human U-87 MG, mouse kidney, mouse heart and mouse brain lysates with IGF Binding Protein 3 Antibody detects a prominent band at approximately 40 kDa in all eight lanes. The Growth Hormone-Dependent Binding Protein Antibody also shows weaker higher-molecular-weight reactivity in several samples, most noticeably around 50-60 kDa. IGFBP3 is glycosylated, accounting for migration above its approximately 31 kDa unmodified molecular weight.



Growth Hormone-Dependent Binding Protein Antibody Staining in Human Intestinal Cancer IHC. Immunohistochemistry of FFPE human intestinal cancer tissue using IGF Binding Protein 3 Antibody demonstrates brown staining in the glandular tumor epithelium, with prominent cytoplasmic and membranous reactivity and comparatively weaker staining in surrounding stromal areas. The Growth Hormone-Dependent Binding Protein Antibody staining clearly delineates many of the epithelial tumor structures. Heat-induced epitope retrieval was performed by boiling sections in 10 mM citrate buffer, pH 6, for 20 min followed by cooling prior to staining.

Description

IGF Binding Protein 3 Antibody recognizes insulin-like growth factor-binding protein 3 (IGFBP3), a secreted member of the insulin-like growth factor-binding protein family. IGFBP3 binds insulin-like growth factors with high affinity and helps regulate their transport, stability, and availability for interaction with cell-surface receptors. Historically described as the growth hormone-dependent binding protein, IGFBP3 is an important component of the circulating IGF system and contributes to the regulation of cellular growth, proliferation, differentiation, survival, and metabolism.

IGFBP3 can associate with IGF1 or IGF2 and the acid-labile subunit (IGFALS) to form a circulating ternary complex. Formation of this complex prolongs the half-life of insulin-like growth factors and alters their availability to tissues and receptors. IGFBP3 itself is subject to regulatory mechanisms including proteolysis and post-translational modification. The mature protein contains multiple potential N-linked glycosylation sites, and glycosylated forms commonly migrate at approximately 40-44 kDa, compared with approximately 29 kDa for the nonglycosylated protein.

The historical Growth Hormone-Dependent Binding Protein designation reflects the relationship between growth hormone and circulating IGFBP3. Early biochemical studies identified a growth hormone-dependent IGF-binding protein in human plasma, while subsequent molecular cloning established the relationship of this protein to IGFBP3. Beyond its role in controlling IGF availability, IGFBP3 has also been investigated for IGF-independent effects on proliferation, apoptosis, and other cellular regulatory processes. These functions have made IGFBP3 relevant to research involving growth and development, metabolism, endocrine signaling, and cancer biology.

This rabbit polyclonal antibody provides an additional reagent for investigating IGFBP3 expression and insulin-like growth factor regulation. Its recognition of IGFBP3 supports research into both the classical IGF-binding functions of the protein and its broader roles in cellular regulation. NSJ Bioreagents supplies this antibody for research use in studies of growth factor biology and associated signaling mechanisms. An IGF Binding Protein 3 Antibody can be used to examine IGFBP3 expression in research involving growth, metabolism, and cellular signaling.

For a Protein Microarray Validated monoclonal targeting the same protein with a different clone, see our IGFBP3 Antibody IGFBP3/3424 / BP-53 Antibody page.

Application Notes

Optimal dilution of the IGF Binding Protein 3 Antibody / Growth Hormone-Dependent Binding Protein Antibody should be determined by the researcher.

Immunogen

Amino acids RREMEDTLNHLKFLNVLSPRGVHIPNCDKKGFYKKKQCR of human IGFBP3 were used as the immunogen for the IGF Binding Protein 3 Antibody.

Storage

After reconstitution, the IGF Binding Protein 3 Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

IGFBP3 antibody, Insulin-like growth factor-binding protein 3 antibody, IGF-binding protein 3 antibody, IGFBP-3 antibody, Growth hormone-dependent binding protein antibody, BP-53 antibody, IBP-3 antibody, IBP3 antibody

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