Revision 1

Store at -20C

#13216

IGFBP3 Antibody

Cell Signaling TECHNOLOGY®

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H	Endogenous	40	Rabbit	#P17936	3486

Product Usage Information

Application	Dilution
Western Blotting	1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

Specificity/Sensitivity

IGFBP3 Antibody recognizes endogenous levels of total IGFBP3 protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ser155 of human IGFBP3 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Insulin-like growth factor (IGF) signaling plays a major role in regulating the proliferation and metabolism of normal and malignant cells. Insulin-like growth factor-binding proteins (IGFBPs) play an integral role in modifying IGF actions in a wide variety of cell types. The six IGFBP family members share a high affinity for IGF binding and are structurally related, but are encoded by distinct genes (1). IGFBPs can exert stimulatory or inhibitory effects by controlling IGF availability through high affinity binding of IGF at the carboxy-terminal domain (2,3). IGFBP3 is the most abundant serum IGFBP and the main mediator for IGF-I bioactivities. IGFBP3 also binds IGF-II, insulin, and other cellular and extracellular components to regulate cell growth, development, and apoptosis through both IGF-dependent and IGF-independent mechanisms (4-8). Research studies describe correlations between increased IGF-I levels and reduced levels of IGFBP3 with increased risks of developing cancer, including breast, colon, lung, and prostate cancer (2).

Background References

1. Hwa, V. et al. (1999) *Endocr Rev* 20, 761-87.
2. Yu, H. and Rohan, T. (2000) *J Natl Cancer Inst* 92, 1472-89.
3. Martin, J.L. and Baxter, R.C. (2011) *Growth Factors* 29, 235-44.
4. Zapf, J. et al. (1990) *J Biol Chem* 265, 14892-8.
5. Coverley, J.A. and Baxter, R.C. (1997) *Mol Cell Endocrinol* 128, 1-5.
6. Ingermann, A.R. et al. (2010) *J Biol Chem* 285, 30233-46.
7. Liu, B. et al. (2000) *J Biol Chem* 275, 33607-13.
8. Baxter, R.C. (2001) *Mol Pathol* 54, 145-8.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human

Trademarks and Patents

Limited Uses

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