Mouse IGFBP-5 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF578

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IGFBP-5 in ELISAs and Western blots. In sandwich ELISAs, less than 3% cross-reactivity with recombinant human IGFBP-5 is observed, and less than 0.3% cross-reactivity with recombinant mouse (rm) IGF-I, rmIGF-II, rmIGFBP-1, rmIGFBP-2, rmIGFBP-3, and rmIGFBP-6 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse IGFBP-5 Val15-Glu271 Accession # Q3UQV0
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

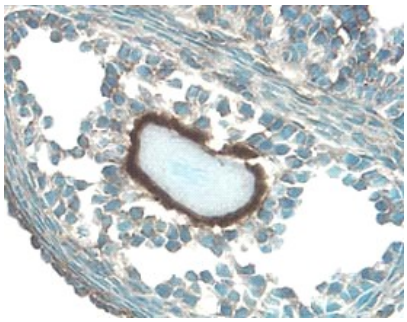
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Mouse IGFBP-5 (Catalog # 578-B5)
Immunohistochemistry	5-15 µg/mL	See Below
Mouse IGFBP-5 Sandwich Immunoassay		**Reagent**
ELISA Capture	0.2-0.8 µg/mL	Mouse IGFBP-5 Antibody (Catalog # AF578)
ELISA Detection	0.1-0.4 µg/mL	Mouse IGFBP-5 Biotinylated Antibody (Catalog # BAF578)
Standard		Recombinant Mouse IGFBP-5 (Catalog # 578-B5)

DATA

Immunohistochemistry



IGFBP-5 in Mouse Ovary. IGFBP-5 was detected in perfusion fixed frozen sections of mouse ovary (follicle with oocyte) using 5 µg/mL Goat Anti-Mouse IGFBP-5 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF578) overnight at 4 °C. Tissue was stained with the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for Chromogenic IHC Staining of Frozen Tissue Sections.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449

Mouse IGFBP-5 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF578

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.

Mouse IGFBP-5 cDNA encodes a 271 amino acid (aa) residue precursor protein with a putative 19 aa residue signal peptide that is processed to generate the 252 aa residue mature protein. Mouse, human and rat IGFBP-5 share 97% identity. IGFBP-5 is expressed by fibroblasts, myoblasts and osteoblasts, making it the predominant IGFBP found in bone extracts. IGFBP-5 has a strong affinity for hydroxyapatite, allowing it to bind to bone cells. When bound to extracelluar matrix, IGFBP-5 is protected from proteolysis and potentiates IGF activity, but when it is soluble, IGFBP-5 is cleaved to a biologically inactive 21 kDa fragment.

References:

1. James, P.L. *et al.* (1993) J. Biol. Chem. **268**:22305.
2. Jones, J.I. and D.R. Clemmons (1995) Endocrine Rev. **16**:3.
3. Kelley, K.M. *et al.* (1996) Int. J. Biochem. Cell Biol. **28**:619.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 **Canada** TEL 855 668 8722 **China** TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449