

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IGFBP-6 in ELISAs and Western blots. In sandwich immunoassays, less than 0.1% cross-reactivity with recombinant human (rh) IGFBP-1, rhIGFBP-2, rhIGFBP-3, rhIGFBP-4, rhIGFBP-5, rhIGFBP-6 and rmlGF-I is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse IGFBP-6 (R&D Systems, Catalog # 776-B6) Gly24-Gly238 Accession # P47880
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

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-6 (Catalog # 776-B6)
Mouse IGFBP-6 Sandwich Immunoassay		Reagent
ELISA Capture	2-8 µg/mL	Mouse IGFBP-6 Antibody (Catalog # MAB7761)
ELISA Detection	0.1-0.4 µg/mL	Mouse IGFBP-6 Biotinylated Antibody (Catalog # BAF776)
Standard		Recombinant Mouse IGFBP-6 (Catalog # 776-B6)

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.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 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.

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-6 cDNA encodes a 238 amino acid (aa) residue precursor protein with a putative 25 aa residue signal peptide that is processed to generate the 213 aa residue mature protein that is O-glycosylated. Mouse and human IGFBP-6 share 73% amino acid similarity. Mouse and rat IGFBP-6 share 94% amino acid similarity and the mouse IGFBP-6 has a 9 amino acid insertion compared to the rat homolog. IGFBP-6 is expressed in ovarian, testicular, muscle, heart and lung tissues in the adult mouse. IGFBP-6 was not detected in total RNA from a whole mouse embryo.

References:

1. Schuller, A.G.P. *et al.* (1994) *Mol. Cell. Endoc.* **104**:57.
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.