

DESCRIPTION

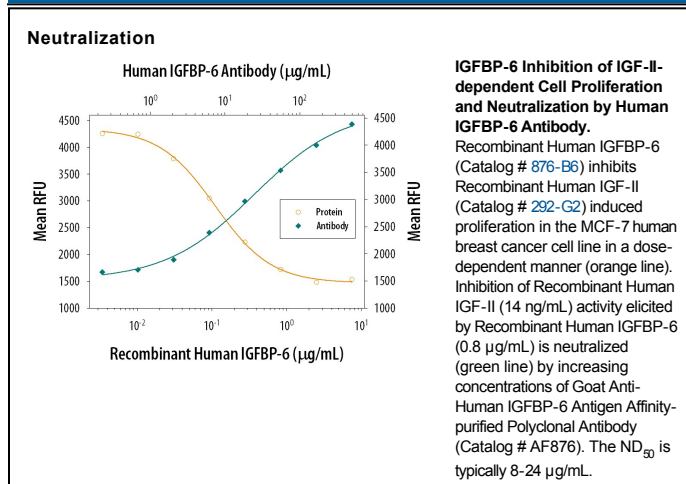
Species Reactivity	Human
Specificity	Detects human IGFBP-6 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 30% cross-reactivity with recombinant mouse IGFBP-6 is observed, 5% cross-reactivity with recombinant human (rh) IGFBP-2 is observed and less than 1% cross-reactivity with rhIGFBP-1, rhIGFBP-3, rhIGFBP-4, and rhIGFBP-5 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human IGFBP-6 Ala25-Gly240 Accession # NP_002169
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
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 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 Human IGFBP-6 (Catalog # 876-B6)
Neutralization		Measured by its ability to neutralize IGFBP-6 inhibition of IGF-II-dependent proliferation in the MCF-7 human breast cancer cell line. Karey, K. P. <i>et al.</i> (1988) <i>Cancer Research</i> 48:4083. The Neutralization Dose (ND ₅₀) is typically 8–24 µg/mL in the presence of 0.8 µg/mL Recombinant Human IGFBP-6 and 14 ng/mL Recombinant Human IGF-II.

DATA



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. <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 IGFBP, including glycosylation, phosphorylation and proteolysis, have been shown to modify the affinities of the binding proteins to IGF.

Human IGFBP-6 cDNA encodes a 240 amino acid (aa) residue precursor protein with a putative 24 aa residue signal peptide that is processed to generate the 216 aa residue mature protein that is O-glycosylated. IGFBP-6 is expressed in ovarian cells, prostatic cells, and fibroblasts. IGFBP-6 is found predominantly in CSF and serum. IGFBP-6 binds preferentially to IGF-II, exhibiting a 2-fold higher affinity for IGF-II than for IGF-I.

References:

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