



Recombinant Protein Technical Manual

Recombinant Mouse IGFBP6/IBP-6 Protein (His Tag)(Active)
RPES2078

Product Data:

Product SKU: RPES2078

Size: 5µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: NP_032370.2

Protein Information:

Molecular Mass: 24 kDa

AP Molecular Mass: 30 kDa

Tag: C-His

Bio-activity: Measured by its ability to inhibit the biological activity of IGFII on MCF7 human breast adenocarcinoma cells (Karey, K. P. et al. (1988) Cancer Research 48:4083.). The ED50 for this effect is typically 1-4 µg/ml in the presence of 20 ng/mL mouse IGFII.

Purity: > 92 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: IGFBP-6

Immunogen Information:

Sequence: Met 1-Gly 238

Background:

Insulin-like growth factor binding protein 6 (IGFBP6) is a 24-kDa protein that binds insulin-like growth factor 1 (IGF) and IGF-2 with high affinity and inhibits IGF action in vitro. The Insulin-like growth factor-binding protein also known as IGFBP serves as a carrier protein for Insulin-like growth factor 1. IGFBPs are clearly distinct but are sharing regions with strong homology. All members of the IGFBP family bind IGF-I and IGF-II with about equal affinity. Insulin-like growth factor (IGF) binding proteins (IGFBPs) have been shown to either inhibit or enhance the action of IGF, or act in an IGF-independent manner in the prostate. IGF-binding protein-4 (IGFBP-4) inhibits IGF-I action in vitro and is the most abundant IGFBP in the rodent arterial wall. IGFBP6 is directly downregulated by the beta-catenin/TCF complex in desmoid tumors, and imply a role for the IGF axis in the proliferation of desmoid tumors. There is mounting evidence that the structure of the IGFBP proteins plays a key role in the regulation of IGF bioavailability, by modulating its molecular size, capillary membrane permeability, target tissue specificity, cell membrane adherence and IGF affinity.