

# Recombinant Protein Technical Manual Recombinant Rat IGFBP6/IBP6 Protein (His Tag)

**RPES3957** 

#### **Product Data:**

**Product SKU:** RPES3957 **Size:** 20μg

Species: Rat Expression host: HEK293 Cells

**Uniprot:** NP 037236.1

### **Protein Information:**

Molecular Mass: 22.9 kDa

**AP Molecular Mass:** 

Tag: C-His

**Bio-activity:** 

**Purity:** > 95 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per μg 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: Met1-Gly226

## 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.