# **Recombinant Human IGFBP-4 Protein**



Catalog No.: RP00185 Recombinant

## **Sequence Information**

Species Gene ID Swiss Prot Human 3487 P22692

**Tags** C-His

Synonyms

IGFBP4;BP-4;HT29-IGFBP;IBP4;IGFBP-4

### **Product Information**

Source Purification
HEK293 cells > 92% by SDSPAGE.

### **Endotoxin**

< 0.1 EU/ $\mu g$  of the protein by LAL method.

#### **Formulation**

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid votex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

### **Contact**

<b>a</b>	400-999-6126
×	cn.market@abclonal.com.cn
$\overline{\mathfrak{S}}$	www.abclonal.com.cn

# **Background**

IGFBP-4 (insulin-like growth factor binding protein 4) is member of the IGFBP family of structurally similar secreted glycoproteins . IGFBP-4 binds both insulin-like growth factor 1 (IGF-1) and IGF-2 with high affinity and inhibits IGF action in vitro. It circulates in the plasma in both glycosylated and non-glycosylated forms. Binding of this protein prolongs the half-life of the IGFs and alters their interaction with cell surface receptors. There is mounting evidence that 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.

### **Basic Information**

#### Description

Recombinant Human IGFBP-4 Protein is produced by HEK293 expression system. The target protein is expressed with sequence (Met1-Glu258) of human IGFBP-4 (Accession  $\#NP_001543.2$ ) fused with a  $6\times His$  tag at the C-terminus.

### **Bio-Activity**

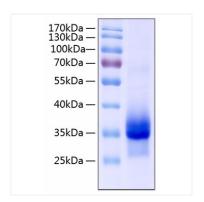
1.Measured by its binding ability in a functional ELISA. Immobilized Human IGFBP4 at 1  $\mu g/mL$  (100  $\mu L/well)$  can bind Human IGF1 with a linear range of 1.95-111.32 ng/mL.|2.Measured by its binding ability in a functional ELISA. Immobilized Human IGFBP4 Protein at 1  $\mu g/mL$  (100  $\mu L/well$ ) can bind IGF1 with a linear range of 1.95-122.3ng/mL.

#### Storage

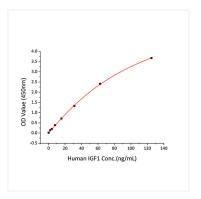
Store the lyophilized protein at -20  $^{\circ}$ C to -80  $^{\circ}$ C for long term. After reconstitution, the protein solution is stable at -20  $^{\circ}$ C for 3 months, at 2-8  $^{\circ}$ C for up to 1 week.

Avoid repeated freeze/thaw cycles.

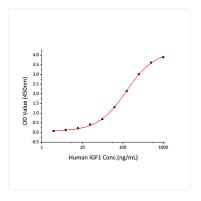
# **Validation Data**



Recombinant Human IGFBP-4 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 35 kDa.



Immobilized Human IGFBP4 at 1  $\mu g/mL$  (100  $\mu L/well) can bind Human IGF1 with a linear range of 1.95-111.32 ng/mL.$ 



Immobilized Human IGFBP4 Protein at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind IGF1 with a linear range of 1.95-122.3ng/mL.