

## Human IGFBP7, His-SUMO Tag, HEK293

 Catalog Number
 LDG015PHM

 Package
 5 μg / 20 μg / 100 μg / Customized package

For full product information, images and publications, please visit our website.



# **Specifications**

**Species of Origin** 

Human

**Affinity Tag** 

His-SUMO Tag (N-term)

**Purity** 

>95% as determined by SDS-PAGE analysis.

**Endotoxin Level** 

<1 EU per 1  $\mu g$  of the protein by the LAL method.

**Expression System** 

**HEK293** 

**Storage Buffer** 

Lyophilized from a 0.2  $\mu m$  filtered solution of PBS, pH 7.4.

Molecular weight

The protein has a calculated MW of 38.18 kDa. The protein migrates as 55 kDa under reducing condition (SDS-PAGE analysis).

Form

Lyophilized

# Background



#### **Background**

IGFBP7, also known as mac25, prostacyclin-stimulating factor (PSF), tumor adhesion factor (TAF), and angiomodulin (AGM), is a secreted protein that belongs to the insulin-like growth factor (IGF)-binding protein (IGFBP) family. In contrast to the other family members, IGFBP7 binds IGFs through the N-terminal domain with low affinity. IGFBP7 is expressed in various human tissues, including the brain, liver, pancreas, and skeletal muscle, and is secreted into circulation. IGF-BP7 modulates many biological functions, such as protein synthesis, proliferation, antiapoptosis, and cell survival. Moreover, it has been reported that IGFBP7 promotes cardiac senescence through IGF-1R/IRS/AKT-dependent suppression of FOXO3a, inhibiting DNA repair, subsequently the leading to the progression of Heart failure. Human and mouse IGFBP7 are highly homologous, sharing 94% a.a. sequence identity.

**Uniprot ID** 

Q16270

#### **Synonyms**

IGFBP-rP1, MAC25 protein, PGI2-stimulating factor, Prostacyclin-stimulating factor, Tumor-derived adhesion factor, TAF

**Sequence Note** 

Ser27-Leu282

### Instruction

#### Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile  $H_2O$  to a concentration not less than 200  $\mu g/mL$  and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.

### Shipping

The product is shipped with polar packs. Upon receipt, store it immediately at -20°C or lower for long term storage.



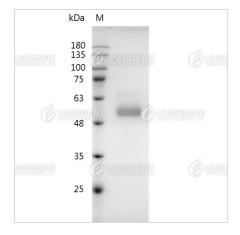
### Stability & Storage

This product is stable after storage at:

- -20°C for 12 months in lyophilized state from date of receipt.
- -20°C or -80°C for 1 month under sterile conditions after reconstitution.

Avoid repeated freeze/thaw cycles.

### **Image**



SDS-PAGE analysis of recombinant human IGFBP7.

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