

Recombinant Human, IGFBP7 / Insulin-Like Growth Factor Binding Protein 7, His-SUMO Tag, HEK293, Animal Free & Carrier Free

Cat #: C-CYP397

Size: 5µg, 20µg, 100µg, 500µg, 1mg

Shipping: Blue Ice

Product Overview

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. IGFBP7 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.

Product Information

Source: HEK293.

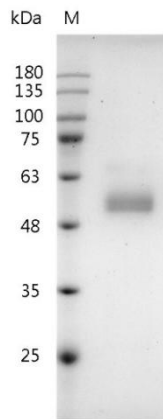
Purity: >95% as determined by SDS-PAGE. Ni-NTA chromatography.

Biological Activity: Testing in process.

Endotoxin: <1EU per 1µg of the protein by the LAL method.

Amino acid sequence: A DNA sequence encoding Human IGFBP7(#Q16270)(Ser27-Leu282) was expressed with polyhistidine-SUMO tag at the N-terminus.

Formulation: Lyophilized from a sterile filtered aqueous solution in 1×PBS, pH 7.4.



SDS-PAGE analysis of recombinant human IGFBP7

Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.2-1.0 mg/mL in sterile distilled H₂O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.