

## Recombinant Human IGFBP-7 Protein (His Tag)

Catalog Number: PDMH100099

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

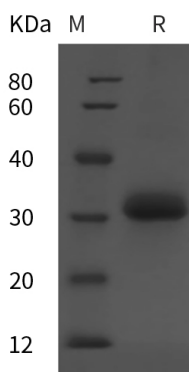
### Description

<b>Species</b>	Human
<b>Source</b>	Mammalian-derived Human IGFBP-7 protein Met1-Leu282, with an C-terminal His
<b>Calculated MW</b>	30.9 kDa
<b>Observed MW</b>	32 kDa
<b>Accession</b>	Q16270
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95% as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU/mg of the protein as determined by the LAL method
<b>Storage</b>	Generally, 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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
<b>Reconstitution</b>	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

### Data



SDS-PAGE analysis of Human IGFBP-7 proteins, 2 µg/lane of Recombinant Human IGFBP-7 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 32 kDa.

### Background

#### For Research Use Only

Insulin-like growth factor-binding protein 7 (IGFBP-7) is a secreted glycosylated protein that contains three protein domain modules. IGFBP7 contains an N-terminal IGFBP domain, followed by a Kazal-type serine proteinase inhibitor domain and a C-terminal immunoglobulin-like C2-type domain. Human and mouse IGFBP7 are highly homologous and share 94% aa sequence identity. It is expressed in many normal tissues and in cancer cells. It is abundantly expressed in high endothelial venules (HEVs) of blood vessels in the secondary lymphoid tissues. It binds IGF and insulin with very low affinity and has been shown to enhance the mitogenic actions of IGF and insulin. IGFBP7 also has IGF/insulin-independent activities. It interacts with heparan sulfate proteoglycans, type IV collagen, and specific chemokines. It supports weak cell adhesion, promotes cell spreading on type IV collagen, and stimulates the production of the potent vasodilator PGI<sub>2</sub>. It modulates tumor cell growth and has also been implicated in angiogenesis.

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