



Recombinant Human IGFBP-7 (C-6His)

Catalog #	EPT294
Expression Host	Human Cells
DESCRIPTION	Recombinant Human Insulin-like Growth Factor-binding Protein 7 is produced by our Mammalian expression system and the target gene encoding Ser27-Leu282 is expressed with a 6His tag at the C-terminus.
Accession	Q16270
Synonyms	Insulin-like growth factor-binding protein 7;IGFBP7;IGF-binding protein 7;IGFBP-rP1;MAC25 protein;Tumor-derived adhesion factor;TAF
Mol Mass	27.3 KDa
AP Mol Mass	30-35 KDa, reducing conditions
Purity	Greater than 95% as determined by reducing SDS-PAGE.
Endotoxin	Less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.
FORMULATION	Lyophilized from a 0.2 μm filtered solution of 20mM





Tris-HCl, 300mM NaCl, pH 8.0.

RECONSTITUTION

Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

It is not recommended to reconstitute to a concentration less than 100 μ g/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

SHIPPING

The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

STORAGE

Lyophilized protein should be stored at $< -20^{\circ}\text{C}$, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at $4-7^{\circ}\text{C}$ for 2-7 days.

Aliquots of reconstituted samples are stable at $< -20^{\circ}\text{C}$ for 3 months.

BACKGROUND

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 PGI₂. It modulates tumor cell growth and has also been implicated in angiogenesis.

SDS-PAGE

