

Recombinant Human Insulin-like Growth Factor-Binding Protein 7 (Human IGF-BP7)

Product Information

Product Name	Cat#	Size
Recombinant Human Insulin-like Growth Factor-Binding Protein 7 (Human IGF-BP7)	92205ES08	5µg
	92205ES60	100µg
	92205ES76	500µg

Product Description

IGF-BPs control the distribution, function and activity of IGFs in various cell tissues and body fluids. Currently, there are seven named IGF-BPs that form high affinity complexes with both IGF-I and IGF-II. IGF-BP7 is expressed in a wide range of normal human tissues, and it generally shows reduced expression in cancer cell lines of prostate, breast, colon, and lung origin. It plays a role in skeletal myogenesis by binding to IGF in a manner that inhibits IGF-induced differentiation of skeletal myoblasts, without affecting IGF-induced proliferation. Additionally, IGF-BP7 suppresses growth and colony formation of prostate and breast cancer cell lines through an IGF-independent mechanism, which causes a delay in the G1 phase of the cell cycle and increased apoptosis. Recombinant Human IGF-BP7 is a 26.4 kDa protein consisting of 256 amino acid residues.

Product Properties

Synonyms	Insulin-like Growth Factor-Binding Protein 7, IBP-7, Mac25, IGF binding protein related protein-1 (IGFBP-rP1)
Accession	Q16270
GeneID	3490
Source	E.coli-derived HumanIGF-BP7 protein,Leu21-Glu282.
Molecular Weight	Approximately 26.4 kDa. SSSDTCGPCE PASCPLPPL GLLGETRDA CGCCPMCARG EGEPGGGGGA GRGYCAPGME CVKSRKRRKG KAGAAAGGPG VSGVCVCKSR YPVCGSDGTT YPSGCQLRAA SQRAESRGEK
AA Sequence	AITQVSKGTC EQGPSIVTPP KDIWNVGAQ VYLSCEVIGI PTPVLIWNKV KRGHYGVQRT ELLPGDRDNL AIQTRGGPEK HEVTGWVLVS PLSKEDAGEY ECHASNSQGG ASASAKITVV DALHEIPVKK GEGAEI
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity	Testing in Progress.
Endotoxin	< 0.1 EU per 1µg of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM Tris-HCl, pH 8.6, 150 mM NaCl. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.
Reconstitution	Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Shipping and Storage

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only.