

IGF-BP7, human recombinant protein

Insulin-like growth factor binding protein-7, IBP-7, Mac25, IGF binding protein related protein-1 (I

Catalog # PBV10797r

Specification

IGF-BP7, human recombinant protein - Product info

Primary Accession Q16270

Calculated MW 26.4 kDa KDa

IGF-BP7, human recombinant protein - Additional Info

Gene ID 3490 Gene Symbol IGFBP7

Other Names

Insulin-like growth factor binding protein-7, IBP-7, Mac25, IGF binding protein related protein-1 (IGFBPrP1)

Gene Source Human Source E. Coli

Assay&Purity SDS-PAGE; ≥98%

Assay2&Purity2 HPLC;
Recombinant Yes

Sequence SSSDTCGPCE PASCPPLPPL GCLLGETRDA

CGCCPMCARG EGEPCGGGGA GRGYCAPGME CVKSRKRKG KAGAAAGGPG VSGVCVCKSR YPVCGSDGTT YPSGCQLRAA SQRAESRGEK AITQVSKGTC EQGPSIVTPP KDIWNVTGAQ VYLSCEVIGI PTPVLIWNKV KRGHYGVQRT ELLPGDRDNL AIQTRGGPEK HEVTGWVLVS PLSKEDAGEY ECHASNSQGQ ASASAKITVV

DALHEIPVKK GEGAEL

Target/Specificity IGF-BP7

Application Notes

Centrifuge the vial prior to opening. Reconstitute in acetic acid to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Format

Lyophilized powder

Storage

-20°C; Sterile filtered through a 0.2 micron filter. Lyophilized from 10 mM Acetic Acid

IGF-BP7, human recombinant protein - Protocols



Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IGF-BP7, human recombinant protein - Images

IGF-BP7, human recombinant protein - Background

IGF-BPs controls 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.

IGF-BP7, human recombinant protein - References

Murphy M.,et al.Cell Growth Differ. 4:715-722(1993). Yamauchi T.,et al.Biochem. J. 303:591-598(1994). Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases. Ota T.,et al.Nat. Genet. 36:40-45(2004). Hillier L.W.,et al.Nature 434:724-731(2005).