

## IGF-BP-4, His, Human

**Cat. No.:** Z03176-10

**Size:** 10.0 ug

**Synonyms:** Insulin-like Growth Factor-Binding Protein 4, IBP-4, HT29-IGF-BP, colon cancer cell growth inhibitor

### Description:

Insulin-like growth factor-binding protein 4 (IGF-BP-4), also known as IBP-4, is a secreted glycoprotein belonging to the IGFBP family. IGF-BP-4 is produced by osteoblasts, epidermis, ovarian follicles and other tissues. It binds both insulin-like growth factor (IGF) I and II, and it circulates in the plasma in both glycosylated and non-glycosylated forms. IGF-BP-4 prolongs the half-life of the IGFs and has been shown to inhibit or stimulate the growth-promoting effects of the IGFs. Pregnancy Associated Plasma Protein A (PAPP-A) proteolytically cleaves IGF-BP-4 and reduces its affinity to bind IGFs, and thus serves as an important regulator of IGF-BP-4 function.

### Amino Acid Sequence:

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00001 DEATHCPPCS EEKLARCRPP VGCEELVREP GCGCCATCAL
00041 GLGMPGCVYT PRCGSGLRGY PPRGVEKPLH TLMHGQGVCM
00081 ELAEIEAIQE SLQPSDKDEG DHPNNSFSPC SAHDRRCLQK
00121 HFAKIRDST SGGKMKVNGA PREDARVPVQ GSCQSELHRA
00161 LERLAASQSR THEDLYIIFI PNCDRNGNFH PKQCHPALDG
00201 QRGKCWCVDR KTGVKLPGGL EPGGELDCHQ LADSFREHHH
00241 HHH
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**Source:** HEK 293

**Species:** Human

**Biological Activity:** ED<sub>50</sub> < 50 ng/ml, measured in a bioassay using FDC-P1 cells in the presence of 15ng/ml human IGF-II.

**Molecular Weight:** 30-35 kDa, observed by reducing SDS-PAGE.

**Formulation:** Lyophilized after extensive dialysis against PBS.

**Reconstitution:** Reconstituted in ddH<sub>2</sub>O or PBS at 100 µg/ml.

**Purity:** > 95% as analyzed by SDS-PAGE.

**Endotoxin Level:** < 0.2 EU/µg, determined by LAL method.

**Storage:** Lyophilized recombinant human IGF-BP-4 remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, human IGF-BP-4, His should be stable up to 1 week at 4°C or up to 2 months at -20°C.