

## 32-20658: Recombinant Human IGF-BP4(Discontinued)

**Reactivity :** Human, Mouse

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

### Description

#### Source:(BTI-Tn-5B1-4) Hi-5 Insect cells

IGF-BPs control the distribution, function and activity of IGFs in various cell tissues and body fluids. IGF-BP4 is the major IGF-BP produced by osteoblasts, and is found in the epidermis, ovarian follicles, and other tissues. IGF-BP4 inhibits the activity of IGF-I and IGF-II by binding in a manner that results in the formation of complexes with reduced ability to signal through cell surface IGF receptors. IGF-BP4 can inhibit the growth of chick pelvis cartilage and HT29 colon adenocarcinoma cells by blocking the mitogenic actions of IGFs, and has also been shown to reduce colony formation by colorectal cancer cells via an IGF-independent pathway. The biological effects of IGF-BP4 can be regulated by Pregnancy Associated Plasma Protein A (PAPP-A), which reduces IGF-BP4/IGF binding affinity by proteolytically cleaving IGF-BP4. The modulation of IGF-BP4 activity by PAPP-A is an important component in the regulation of ovarian folliculogenesis and in the growth inhibition of responding ovarian cancer cells. Recombinant Human IGF-BP4 is a 25.7 kDa protein consisting of 237 amino acid residues including, the IGF-BP domain and thyroglobulin type-I domain.

### Product Info

**Amount :** 5 µg / 20 µg

**Purification :** Purity: >= 95% by SDS-PAGE gel and HPLC analyses.

**Content :** This recombinant protein is supplied in lyophilized form.

**Amino Acid :** DEAIHCPPCS EEKLARCRPP VGCEELVREP GCGCCATCAL GLGMPCGVYT PRCGSLRCY PPRGVEKPLH  
TLMHGQGVCM ELAEIEAIQE SLQPSDKDEG DHPNNSFSPC SAHRRCLQK HFAKIRDST  
SGGKMKVNGA PREDARVPQ GSCQSELHRA LERLAASQSR THEDLYIPI PNCDRNGNFH PKQCHPALDG  
QRGKCVDR KTGKLPGL EPKGELDCHQ LADSFRE

### Application Note

Determined by its ability to inhibit IGF-I induced proliferation of FDC-P1 cells.