

Recombinant Human IGF-BP4
Catalog # PBG10173**Specification**

Recombinant Human IGF-BP4 - Product Information**Recombinant Human IGF-BP4 - Additional Information****Description**

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 also 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 25.8 kDa protein consisting of 237 amino acid residues including the IGF-BP domain and thyroglobulin type-I domain.

Manufactured using (BTI-Tn-5B1-4) cells under license from the Boyce Thompson Institute for Plant Research, Inc.

Biological Activity

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

Authenticity

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

Endotoxin

Endotoxin level is <0.1 ng/ µg of protein (<1EU/ µg).

Protein Content

Verified by UV Spectroscopy and/or SDS-PAGE gel.

Storage

-20°C

Precautions

Recombinant Human IGF-BP4 is for research use only and not for use in diagnostic or therapeutic procedures.

Recombinant Human IGF-BP4 - Protocols

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

- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Recombinant Human IGF-BP4 - Images