IGF-BP5 Human E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Human
Other names: Insulin-like Growth Factor-Binding Protein5

Cat. No.:

RBG10192005	(5 µg)
RBG10192025	(25 µg)
RBG10192100	(100 µg)

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-BP5 is a 28.6 kDa, cysteine-rich, secreted protein produced by vascular smooth muscle cells. It is the major IGF-binding protein present in bone tissue and helps potentiate the action of IGF-I on smooth muscle cells, fibroblasts, and osteoblasts. Data shows that IGFBP-5 acts as a growth inhibitor and pro-apoptotic agent in breast cancer cells. IGFBP-5-overexpressing mice show an increase in neonatal mortality, reduced female fertility, whole-body growth inhibition, and retarded muscle development. Recombinant Human IGF-BP5 is a 28.6 kDa protein consisting of 253 amino acid residues.

Research topic

Apoptosis, Diabetology - Other Relevant Products, Oncology

Amino Acid Sequence

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MLGSFVHCEP CDEKALSMCP PSPLGCELVK EPGCGCCMTC ALAEGQSCGV YTERCAQGLR CLPRQDEEKP LHALLHGRGV
CLNEKSYREQ VKIERDSREH EEPTTSEMAE ETYSPKIFRP KHTRISELKA EAVKKDRRKK LTQSKFVGGA ENTAHPRIIS
APEMRQESEQ GPCRRHMEAS LQELKASPRM VPRAVYLPNC DRKGFYKRKQ CKPSRGRKRG ICWCVDKYGM KLPGMEYVDG
DFQCHTFDSS NVS
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Source

E. coli

Purity

98%

Biological Activity

The ED_{50} was determined by its ability to inhibit IGF-II induced proliferation of MCF-7 is 0.3 µg/ml in the presence of 15 ng/ml of human IGF-II.

Endotoxin

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

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. 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.

Storage, Stability/Shelf Life

-20°C

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