Rev. 2

ScienCell™ Research Laboratories

Recombinant Human IGF-BP3 (rhIGF-BP3)

Catalog #105-01B3

Description

Insulin-like growth factor binding protein (IGFBP) is a critical component of the insulin-like growth factor (IGF) family which regulate the biological functions of the IGFs and may also function in IGF-independent pathways. IGF-BP3 is a 30 kDa cysteine-rich secreted protein. It is the primary IGF binding protein found in the plasma of both humans and animals and is also stored in the α-granules of platelets. Beyond regulating the activity of IGF-I and IGF-II, IGF-BP3 also inhibits the function of follicle-stimulating hormone (FSH). Low plasma levels of IGF-BP3 are often associated with dwarfism, while elevated levels can contribute to conditions such as acromegaly. In fibroblasts, the expression of IGF-BP3 is upregulated by various mitogenic growth factors, including bombesin, vasopressin, platelet-derived growth factor (PDGF), and epidermal growth factor (EGF).

Specifications

Synonyms:	Growth hormone dependent binding protein, IBP3, BP-53
AA Sequence:	GASSGGLGPV VRCEPCDARA LAQCAPPPAV CAELVREPGC GCCLTCALSE GQPCGIYTERC GSGLRCQPSP DEARPLQALL DGRGLCVNASA VSRLRAYLLP APPAPGNASES EEDRSAGEVE SPSVSSTHRVS DPKFHPLHSK IIIIKKGHAKD SQRYKVDYESQ STDTQNFSSE SKRETEYGPC RREMEDTLNH LKFLNVLSPR GVHIPNCDKK GFYKKKQCRP SKGRKRGFCW CVDKYGQPLP GYTTKGKEDV HCYSMQSK
Source:	*Escherichia coli*
Molecular Weight:	Approximately 28.8 kDa protein consisting of 264 amino acid residues
Purity:	> 95%

Quality Control

Endotoxin:	<0.1 ng/μg of protein (<1 EU/μg)
Sterility:	No microorganisms
Physical Appearance:	White powder

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Formulation

Lyophilized from a 0.2μm filtered concentrated solution in PBS, pH 7.4.

Reconstitution

Reconstitute in sterile distilled water containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL.

Shipping and Storage

Gel ice. Upon receipt, store at -20ºC after receiving. Upon reconstitution, store at 2-8ºC for up to one week. For maximal stability, aliquot and store at -20ºC. Avoid repeated freeze/ thaw cycles.

Usage

rhIGF-BP3 is for research use only. It is not approved for human or animal use, or for application in clinical or *in vitro* diagnostic procedures.