DATASHEET
Version 20181206

IGF-BP-3, Human

Cat. No.: Z02862-1

Size: 1.0 mg

Synonyms: IGF-BP3, Human;

Description:

IGF-BP3 is a 30 kDa cysteine-rich secreted protein. It is the major IGF binding protein present in the plasma of human and animals and it is also found in ^{a}-granules of platelets. In addition to its ability to modulate the activity of IGF-I and IGF-II, IGF-BP3 exerts inhibitory effects on follicle stimulating hormone (FSH) activity. Decreased plasma levels of IGF-BP3 often results in dwarfism, whereas elevated levels of IGF-BP3 may lead to acromegaly. The expression of IGF-BP3 in fibroblasts is stimulated by mitogenic growth factors such as Bombesin, Vasopressin, PDGF, and EGF.

Amino Acid Sequence:

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00001 GASSGGLGPV VRCEPCDARA LAQCAPPPAV CAELVREPGC
00041 GCCLTCALSE GQPCGIYTER CGSGLRCQPS PDEARPLQAL
00081 LDGRGLCVNA SAVSRLRAYL LPAPPAPGNA SESEEDRSAG
00121 EVESPSVSST HRVSDPKFHP LHSKIIIIKK GHAKDSQRYK
00161 VDYESQSTDT QNFSSESKRE TEYGPCRREM EDTLNHLKFL
00201 NVLSPRGVHI PNCDKKGFYK KKQCRPSKGR KRGFCWCVDK
00241 YGQPLPGYTT KGKEDVHCYS MQSK
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Source: *E. coli*

Species: Human

Biological Activity: Fully biologically active when compared to standard. The ED_{50} as determined by inhibiting IGF-II induced proliferation of serum free human MCF-7 cells is less than 200 ng/ml, corresponding to a specific activity of > 5.0×10^3 IU/mg in the presence of 15 ng/ml of rHuIGF-II.

Molecular Weight: Approximately 28.8 kDa, a single non-glycosylated polypeptide chain containing 264 amino acids.

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

Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Reconstitution: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Purity: > 98 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1 EU/μg of rHuIGF-BP3 as determined by LAL method.

Storage: This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze/thaw cycles.

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