

# Insulin-Like Growth Factor-II, human recombinant (rHuIGF-2)

Catalog No: 50342 Lot No: XXXXX Source: E. coli

Synonyms: Somatomedin-A, IGF2, INSIGF, pp9974, C11orf43, FLJ22066, FLJ44734

## **Background**

IGF-2 is a member of the insulin family of polypeptide growth factors that is involved in development and growth. It is an imprinted gene and is expressed only from the paternally inherited allele. It is a candidate gene for eating disorders. There is a read-through, INS-IGF2, which aligns to this gene at the 3' region and to the upstream INS gene at the 5' region. Two alternatively spliced transcript variants encoding the same protein have been found for this gene.

#### Description

Insulin-Like Growth Factor-II human recombinant produced in E. coli is a single, non-glycosylated, polypeptide chain containing 67 amino acids and having a molecular mass of 7.5 kDa. IGF-II is purified by proprietary chromatographic techniques.

#### **Physical Appearance**

Sterile filtered white lyophilized (freeze-dried) powder.

#### **Formulation**

The protein was lyophilized from a sterile filtered solution containing 0.1% trifluoroacetic acid (TFA).

## Solubility

It is recommended to reconstitute the lyophilized IGF2 in sterile 18 M $\Omega$ -cm H2O at a concentration of 100  $\mu$ g/ml, which can then be further diluted to other agueous solutions.

# Stability

Lyophilized IGF-2, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IGFII should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

### Purity

Greater than 95.0% as determined by SDS-PAGE.

# **Amino Acid Sequence**

AYRPSETLCG GELVDTLQFV CGDRGFYFSR PASRVSRRSR GIVEECCFRS CDLALLETYC ATPAKSE

#### Activity

The activity is determined by the dose dependent proliferation of FDC-P1 cells and is typically 8.39 ng/ml, corresponding to a specific activity of  $1.2 \times 10^5$  IU/mg.

#### Usage

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