Recombinant Human Insulin-like Growth Factor-2, High Concentration (rHuIGF-2, HC)

PrimeGene Technical Data Sheet

Catalog Number:	105-02G
Source:	*Escherichia coli.*
Molecular Weight:	Approximately 7.5 kDa, a single non-glycosylated polypeptide chain containing 67 amino acids.
Quantity:	100ug/500ug/1mg
AA Sequence:	AYRPSETLCG GELVDTLQFV CGDRGFYFSR PASRVSRRSR GIVEECCFRS CDLALLETYC ATPAKSE
Purity:	> 95% by SDS-PAGE analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED_{50} as determined by a cell proliferation assay using serum free human MCF-7 cells is 1.5-6 ng/mL.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 μm filtered solution in Acetic Acid, with 0.02 % Tween-20.
Endotoxin:	Less than 0.1 EU/μg of rHuIGF-2 as determined by LAL method.
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 0.1-5.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 ℃. Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. ● 12 months from date of receipt, -20 to -70 °C as supplied ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 3 months, -20 to -70 °C under sterile conditions after reconstitution
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. **NOT FOR HUMAN USE.**

Human Insulin-like Growth Factor-2

Insulin-like growth factor (IGF)-I (also known as somatomedin C and somatomedin A) and IGF-II (multiplication stimulating activity or MSA) belong to the family of insulin-like growth factors that are structurally homologous to proinsulin. Mature IGF-I and IGF-II share approximately 70% sequence identity. Both IGF-I and IGF-II are expressed in many tissues and cell types and may have autocrine, paracrine and endocrine functions. Mature IGF-I and IGF-II are highly conserved between the human, bovine and porcine proteins (100% identity), and exhibit cross-species activity.

The IGFL (insulin-like growth factor-like) family includes four small (~11 kDa), probably secreted family members in humans and one in mouse. This family shares A and B chain cysteine motifs with the IGF superfamily, and has an additional cysteine motif within an uncleaved region corresponding to the C peptide of the IGF family.