

## Recombinant Human Insulin-like Growth Factor-2, High Concentration

### Information

<b>Gene ID</b>	
<b>Accession #</b>	
<b>Alternate Names</b>	
<b>Source</b>	Escherichia coli.
<b>M.Wt</b>	Approximately 7.5 kDa, a single non-glycosylated polypeptide chain containing 67 amino acids.
<b>AA Sequence</b>	AYRPSETLCG GELVDTLQFV CGDRGFYFSR PASRVSRRSR GIVEECCFRS CDLALLETYC ATPAKSE
<b>Appearance</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Stability &amp; Storage</b>	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
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in Acetic Acid, with 0.02 % Tween-20.
<b>Reconstitution</b>	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 °C. Further dilutions should be made in appropriate buffered solutions.
<b>Biological Activity</b>	Fully biologically active when compared to standard. The ED as determined by a cell proliferation assay using serum free human MCF-7 cells is 1.5-6 ng/mL.
<b>Shipping Condition</b>	Gel pack.
<b>Handling</b>	Centrifuge the vial prior to opening.
<b>Usage</b>	For Research Use Only! Not to be used in humans.

### Components and Storage

Components	100µg	500µg
Recombinant Human Insulin-like Growth Factor-2, High Concentration	100µg	500µg

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- 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

## Quality Control

Purity	> 95 % by SDS-PAGE analyses.
Endotoxin	Less than 0.1 EU/ $\mu$ g of rHuIGF-2 as determined by LAL method.

## Description

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.

## Reference

**APExBIO Technology**

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