

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

#R00132

Size: 100 µg/500 µg

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.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

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.

AA Sequence

AYRPSETLCGGELVDTLQFVCGDRGFYFSRPASRVSR
RRSRGIVEECCFRSCDLALLETYCATPAKSE

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 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 7.5 kDa, a single non-glycosylated polypeptide chain containing 67 amino acids.
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

Shipping

as determined by LAL method.

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
