

Recombinant Human Insulin-like Growth Factor-1 R36Q

#R00128

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

IGF-1 belonged to the insulin gene family, is a mitogenic polypeptide growth factor that stimulate the proliferation and survival of various cell types including muscle, bone, and cartilage tissue in vitro. It is produced primarily by the liver as an endocrine hormone as well as in target tissues in a paracrine/autocrine fashion. The production of IGF-1 is stimulated by growth hormone (GH) and can be retarded by undernutrition, growth hormone insensitivity, lack of growth hormone receptors, or failures of the downstream signaling pathway post GH receptor including SHP2 and STAT5B.

AA Sequence

GPETLCGAELVDALQFVCGDRGFYFNKPTGYGSSSQ
RAPQTGIVDECCFRSCDLRRLEMYCAPLKPAKSA

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.

Product Specification

Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 7.7 kDa, a single polypeptide chain containing 70 amino acids.
Purity	> 95% by SDS-PAGE analyses.
Biological Activity	Test in process.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM PB, 150 mM NaCl, pH5.4.
Endotoxin	Less than 0.1 EU/µg of rHuIGF-1 R36Q as determined by LAL method.
Shipping	The product is shipped at

ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
