

Recombinant Human Insulin-like Growth Factor-1, 15N Stable Isotope Labeled High purity

Catalog No: #AP60070

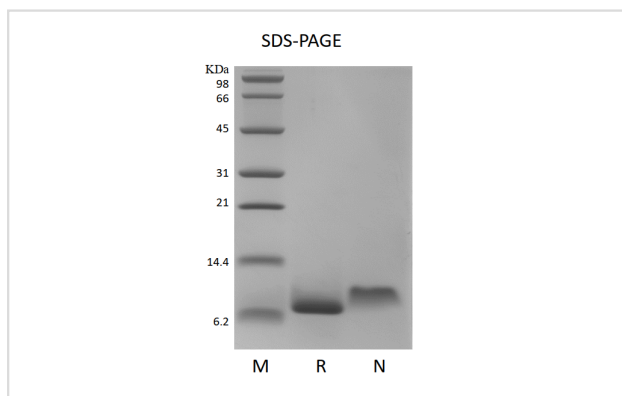
Package Size: #AP60070-1 10ug #AP60070-2 100ug #AP60070-3 500ug

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Description

Product Name	Recombinant Human Insulin-like Growth Factor-1, 15N Stable Isotope Labeled High purity
Host Species	Escherichia coli
Purification	>97% by SDS-PAGE analyses. >90% by RP-HPLC analyses.
Calculated MW	Approximately 7743 Da, a single non-glycosylated polypeptide chain containing 70 amino acids. 15N stable isotope labeled.
Target Sequence	GPETLCGAEL VDALQFVCGD RGFYFNKPTG YGSSSRAPQ TGIVDECCFR SCDLRRLEMY CAPLKPAKSA
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, 0.02% Tween-20, pH 7.0.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. □ A minimum of 12 months from date of receipt, when stored at ≤-20 °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.

Images



Background

Human Insulin-like Growth Factor-1

The insulin-like growth factors (IGFs) belonged to the insulin gene family, are mitogenic polypeptide growth factors that stimulate the proliferation and survival of various cell types including muscle, bone, and cartilage tissue in vitro. The IGFs are similar by structure and function to insulin, but have a much higher growth-promoting activity than insulin. IGF-1 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.

Recombinant human IGF-1 are globular proteins containing 70 amino acids and 3 intra-molecular disulfide bonds. Mature human IGF-1 shares 94 % and 96 % a.a. sequence identity with mouse and rat IGF-1, respectively, and exhibits cross-species activity.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.