



Recombinant Mouse LR3-IGF-1 (C-6His)

Catalog #	EPT112
Expression Host	E.coli
DESCRIPTION	Recombinant Mouse Insulin-like Growth Factor I is produced by our E.coli expression system and the target gene encoding Gly49-Ala118 is expressed with a 6His tag at the C-terminus.
Accession	P05017
Synonyms	IGF1; IGF-1; insulin-like growth factor 1; Insulin-like growth factor I; Somatomedin C; somatomedin-C
Mol Mass	10.2 KDa
AP Mol Mass	12 KDa, reducing conditions
Purity	Greater than 95% as determined by reducing SDS-PAGE.
Endotoxin	Less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.
FORMULATION	Lyophilized from a 0.2 μm filtered solution of 20mM NaAc, pH 4.5.





RECONSTITUTION

Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

It is not recommended to reconstitute to a concentration less than 100 μ g/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

SHIPPING

The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

STORAGE

Lyophilized protein should be stored at $< -20^{\circ}\text{C}$, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at $4-7^{\circ}\text{C}$ for 2-7 days.

Aliquots of reconstituted samples are stable at $< -20^{\circ}\text{C}$ for 3 months.

BACKGROUND

Insulin-like growth factor I (IGF1) belongs to the family of insulin-like growth factors that are structurally homologous to proinsulin. Mouse IGF-I is synthesized as two precursor isoforms with alternate N- and C-terminal propeptides. These isoforms are differentially expressed by various tissues. Mature





mouse IGF-I shares 94% and 99% aa sequence identity with human and rat IGF-I, respectively, and exhibits cross-species activity. It shares 60% aa sequence identity with mature mouse IGF-II. IGF-I induces the proliferation, migration, and differentiation of a wide variety of cell types during development and postnatally. It plays an important role in muscle regeneration and tumor progression. IGF-I binds IGF-I R, IGF-II R, and the insulin receptor. IGF-I association with IGF binding proteins increases its plasma half-life and modulates its interactions with receptors.

SDS-PAGE

