


## Mouse IGF- I protein

Cat #: PRP1309

Size: 5ug/20ug/100ug/1mg

### Product Information

	<b>Product Name:</b> Mouse IGF- I protein		
<b>REF</b>	<b>Catalog Number:</b> PRP1309	<b>LOT</b>	<b>Lot Number:</b> Refer to product label
	<b>Purity:</b> > 99 % as determined by SDS-PAGE		
	<b>Storage:</b> Store at -20°C		<b>Preparation method:</b> <i>E. coli</i>
	<b>Shipping:</b> The product is shipped at ambient temperature.		

**Background:** IGF I, also known as Mechano Growth Factor, somatomedin-C, IGF-I, and IGF1, is a secreted protein that belongs to the insulin family. The insulin family, comprised of insulin, relaxin, insulin-like growth factors I and II ( IGF-I and IGF-II ), and possibly the beta-subunit of 7S nerve growth factor, represents a group of structurally related polypeptides whose biological functions have diverged. The IGFs, or somatomedins, constitute a class of polypeptides that have a key role in pre-adolescent mammalian growth. IGF-I expression is regulated by GH and mediates postnatal growth, while IGF-II appears to be induced by placental lactogen during prenatal development. IGF1 / IGF-I may be a physiological regulator of [1-14C]-2-deoxy-D-glucose (2DG) transport and glycogen synthesis in osteoblasts. IGF1 / IGF-I stimulates glucose transport in rat bone-derived osteoblastic (PyMS) cells and is effective at much lower concentrations than insulin, not only regarding glycogen and DNA synthesis but also about enhancing glucose uptake. Defects in IGF1 / IGF-I are the cause of insulin-like growth factor I deficiency (IGF1 deficiency) which is an autosomal recessive disorder characterized by growth retardation, sensorineural deafness, and mental retardation.

**Sequence:** Amino acid sequence derived from Mouse IGF- I protein (NP\_001104744.1) (Gly49-Ala118) was expressed.

**Protein length:** The Recombinant Mouse IGF- I protein consists of 70 amino acids and predicts a molecular mass of 7.7 Kda.

**Biological Activity:** Testing in progress.

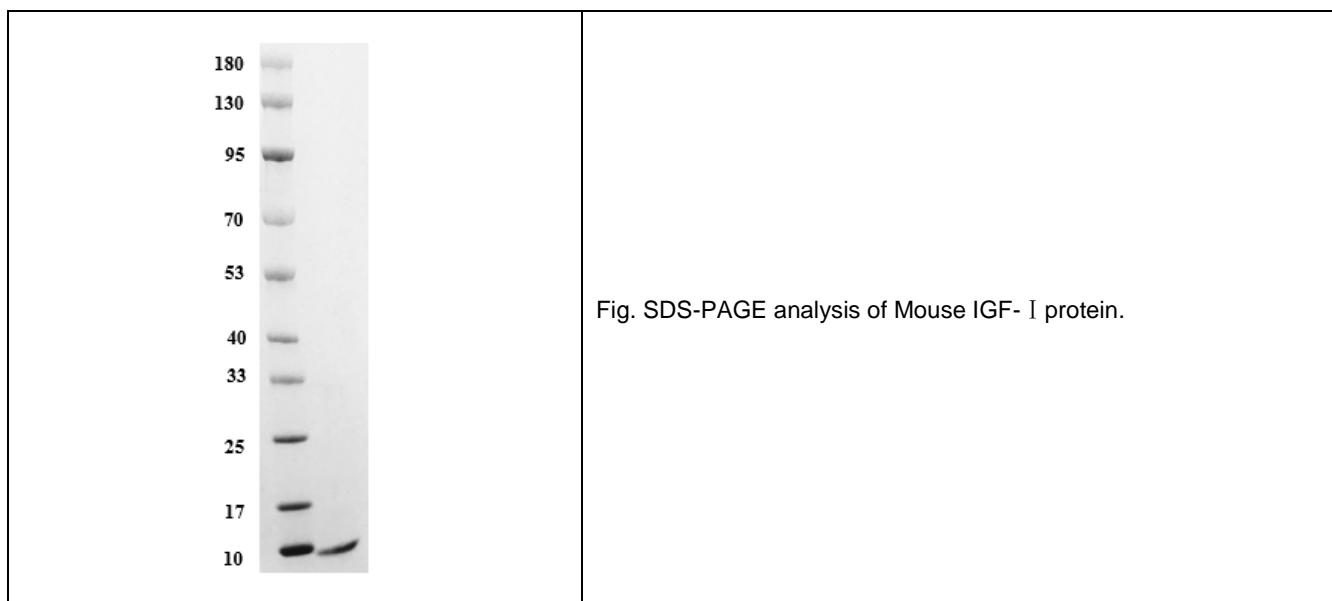
**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.

**Formulation:** Lyophilized from sterile 20 mM Tris with 150 mM NaCl, pH 7.4.

**Storage Instructions:** Lyophilized Mouse IGF- I protein product should be stored desiccated below -20°C. Upon

reconstitution, the protein should be stored at 4°C between 2-7 days and for future use below -20°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Usage notes:** Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized Mouse IGF- I protein using the buffer we provided not less than 100µg/ml, which can then be further diluted to other aqueous solutions.



**Note:** The product listed herein is for research use only and is not intended for use in human or clinical diagnosis. Suggested applications of our products are not recommendations to use our products in violation of any patent or as a license. We cannot be responsible for patent infringements or other violations that may occur with the use of this product.