

## RPCB1653

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### Product Information

<b>Product SKU:</b>	RPCB1653	<b>Gene ID:</b>	16000	<b>Size:</b>	10µg
<b>Tag:</b>	C-hFc	<b>Reactivity:</b>	Mouse		

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### Additional Information

<b>Expression Host:</b>	HEK293 cells	<b>Swissprot:</b>	P05017
<b>Purity:</b>	-		

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### Protein Information

**Background:** IGF1 (Insulin-like growth factor-1) is structurally and functionally related to insulin but has a much higher growth-promoting activity. A variety of cellular responses are induced by IGF1, including cell proliferation, differentiation, migration, and survival. Further, IGF1 is a polypeptide growth factor that stimulates the proliferation of a wide range of cell types in muscle, bone, and cartilage tissue. IGF1 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 with regards to enhancing glucose uptake. In circulation, IGFs are predominantly bound to binding proteins (IGFBPs) which prolong the half-life of the IGFs and play a role in delivering them to target tissues. IGF-I is known as one of the most potent activators of the AKT signaling pathway which is known to be a stimulator of proliferation and an inhibitor of programmed cell death. Moreover, mature human IGF-I is 100% homologous with bovine and porcine proteins. Low levels of IGF1 have been linked to Alzheimer's disease. IGF1 is processed from a precursor, bound by a specific receptor, and secreted. Defects in the IGF1 gene are a cause of insulin-like growth factor 1 deficiency and several transcript variants encoding different isoforms have been found.

- Protein Description:** High quality, high purity and low endotoxin recombinant Recombinant Mouse IGF-I Protein , tested reactivity in HEK293 cells and has been validated in SDS-PAGE.100% guaranteed.
- Endotoxin:** <0.001EU/μg of the protein by LAL method.
- Formulation:** Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.
- Storage:** Store at -20°C.Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.