

Product datasheet for **TP728327M**

Recombinant IGF-I (Insulin-like growth factor-I), Mouse

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant IGF-I (Insulin-like growth factor-I), Mouse
Species:	Mouse
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MGPETLCGAELVDALQFVCGPRGFYFNKPTGYGSSIRRAPQTGIVDECCFRSCDLRRLEMYCAPLKPTKAA with polyhistidine tag at the C-terminus.
Tag:	His Tag (C-term)
Predicted MW:	The protein has a calculated MW of 8.61 kDa. The protein migrates as 11-17 kDa under reducing condition (SDS-PAGE analysis).
Purity:	>98% as determined by SDS-PAGE.
Buffer:	The protein was lyophilized from a 0.2 µm filtered solution containing 1X PBS, pH 8.0.
Bioactivity:	Measure by its ability to induce MCF-7 cells proliferation. The ED ₅₀ for this effect is <2 ng/mL. The specific activity of recombinant mouse IGF-I is > 5 x 10 ⁵ IU/mg.
Endotoxin:	<0.1 EU per 1 µg of the protein by the LAL method.
Reconstitution Method:	Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the lyophilized protein in sterile H ₂ O to a concentration not less than 100 µg/mL and incubate the stock solution at room temperature for at least 20 mins to ensure sufficient re-dissolved. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.
Applications:	Cell culture
Storage:	Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to 8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.
UniProt ID:	<u>P05017</u>
Synonyms:	Somatamedin C, IGF-IA



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Summary:

Insulin Like Growth Factors 1 (IGF-I) is a 7.81 kDa member of the Insulin-like Growth Factors with 71 amino acid residues. IGF-I is mainly expressed from liver, adipose tissue, cervi, endometrial stromal cells, leydig cells, and can be isolated from plasma. IGF-I is mediating the protein anabolic and promoting effect of pituitary growth hormone. IGF-I also affects metabolism of glycogen, DNA synthesis and glucose uptake via binding to IGF-I receptor.