

Recombinant Murine Insulin-Like Growth Factor 1 (rm IGF-1)

Insulin-like growth factors (**IGFs**), comprise a family of peptides that play important roles in mammalian growth and development. IGF-1 mediates many of the growth-promoting effects of growth hormone (GH; MIM 139250). Early studies showed that growth hormone did not directly stimulate the incorporation of sulfate into cartilage, but rather acted through a serum factor, termed 'sulfation factor', which later became known as 'somatomedin' (Daughaday et al., 1972). Three main somatomedins have been characterized: somatomedin C (IGF1), somatomedin A (IGF2; MIM 147470) and somatomedin B (MIM 193190)

Recombinant murine IGF-1 produced in *E. Coli* is a single, non-glycosylated, polypeptide chain containing 70 amino acids and having a molecular mass of 7.600 kDa. rm IGF-I is purified by proprietary chromatographic techniques.

Synonyms :	Somatomedin C, IGFI A
Source:	<i>Escherichia coli</i>
AA Sequence:	The sequence of the first five N-terminal amino acids was determined and was found to be Gly-Pro-Glu-Thr-Leu.
Formulation:	Lyophilized with no additives.
Reconstitution:	Reconstitute in sterile endotoxin free water not less than 100 µg/ml
Stability:	Lyophilized rm IGF-1, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rm IGF-1 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0,1 % HSA or BSA). Please avoid freeze-thaw cycles.
Biological Activity:	The ED ₅₀ , calculated by the dose-dependant proliferation of murine BALB/C 3T3 cells (measured by 3H-thymidine uptake) is less than 1.0 ng/ml, corresponding to a specific activity of 1x10 ⁶ U/mg.
Purity:	Greater than 95.0% as determined by SDS-PAGE.
Endotoxicity:	The endotoxin level is less than 0.1 ng per µg (1EU/µg) determined by LAL method
Order N°:	rm IGF-1 +Size available sizes: 10 µg, 50 µg

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