

PRODUCT INFORMATION

## IGF-I (Insulin-like growth factor-I), Human

v. 231001

Catalog number	C01114-5UG / C01114-20UG / C01114-100UG
Package	5 μg / 20 μg / 100 μg
Description	Insulin-like growth factor 1 (IGF-1), also called somatomedin C, is a protein that in humans is encoded by the IGF1 gene. IGF-1 is a hormone similar in molecular structure to insulin. It plays an important role in childhood growth and continues to have anabolic effects in adults. A synthetic analog of IGF-1, mecasermin, is used for the treatment of growth failure.
Source	Escherichia coli
Sequence	MGPETLCGAELVDALQFVCGDRGFYFNKPTGYGSSSRRAPQTGIVDECCFRS CDLRRLEMYCAPLKPAKSA with polyhistidine tag at the C-terminus
Endotoxin level	<0.01 EU per 1 µg of the protein by the LAL method.
Activity	Measure by its ability to induce MCF-7 cells proliferation. The ED $_{50}$ for this effect is 0.9-3.1 ng/mL. The specific activity of recombinant human IGF-I is approximately >1.2 x $10^3$ IU/mg.
Purity	>95% as determined by SDS-PAGE.
Form	Lyophilized
Storage Buffer	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile $H_2O$ to a concentration not less than 200 $\mu g/mL$ and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.
Stability & Storage	This product is stable after storage at:  -20°C for 12 months in lyophilized state from date of receipt.  -20°C or -80°C for 1 month under sterile conditions after reconstitution.  Avoid repeated freeze/thaw cycles.





SDS-PAGE analysis of recombinant human IGF-I

For research use only.