

Product: **Recombinant Human IGF-I**
Cat #: 300-132P
Powder

Description	Insulin-like Growth Factor I (IGF-I) is a growth factor produced by the liver when stimulated with growth hormone and can be found circulating throughout the body. IGF-I activates the IGF-I receptor (IGF1R) and the insulin receptor to mediate growth of almost every cell of the body. 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. Mature human IGF-I is 100% homologous with bovine and porcine proteins. Alternate names: Somatamedin C, mechano growth factor, IGF-IA
MW	Non-glycosylated protein, containing 70 amino acids, with a molecular weight of 7.7 kDa.
Physical Appearance	Sterile filtered white lyophilized (freeze-dried) powder.
Source	<i>E. coli</i>
Formulation	Recombinant human IGF-I is lyophilized with no additives.
Reconstitution	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.
Stability	Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.
Biological Activity	The activity is determined by the dose-dependent proliferation of mouse FDC-P1 cells is typically less than 1.0 ng/mL.
Endotoxin Level	Measured by kinetic LAL analysis and is typically ≤ 1 EU/ μ g protein.
AA Sequence	GPETLCGAEL VDALQFVCGD RGFYFNKPTG YGSSRRAPQ TGIVDECCFR SCDLRRLEMY CAPLKPAKSA

Purity greater than 98% determined by HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm.

Protein content determined by HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm.

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!