

32-12117: Human Insulin-like Growth Factor I

Gene : IGF1
Gene ID : 3479
Uniprot ID : P05019
Alternative Name : Mechano growth factor, IBP1

Description

Source: Genetically modified E.coli.

Predicted MW: Monomer, 7.7 kDa (70 aa)

Insulin-like growth factor I (IGF-I) is a growth factor that is produced by the liver. IGF-1 production is stimulated by growth hormone (GH). IGF-I binds the insulin-like growth factor 1 receptor (IGF1R) and the insulin receptor to stimulate systemic body growth. IGF-I is one of the most potent activators of the AKT signaling pathway, which stimulates cell proliferation and inhibits programmed cell death. Mature human IGF-I is 100% homologous to bovine and porcine IGF-1 proteins.

Product Info

Amount : 100 µg / 1 mg
Purification : Reducing and Non-Reducing SDS PAGE at $\geq 95\%$
Content : Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)
Sterile water at 0.1 mg/mL
Storage condition : Store at -20°C
Amino Acid : GPETLCGAEL VDALQFVCGD RGFYFNKPTG YGSSRRAPQ TGIVDECCFR SCDLRRLEMY CAPLKPAKSA

Application Note

Endotoxin: Less than $0.1 \text{ ng}/\mu\text{g}$ ($1 \text{ IEU}/\mu\text{g}$) as determined by LAL test.

Biological Activity was determined by FDC-P1 cell proliferation at $\leq 10 \text{ ng/mL}$; $\geq 1.0 \times 10^5 \text{ units/mg}$ (typical ED50 is $< 1 \text{ ng/mL}$). Centrifuge vial before opening, Suspend the product by gently pipetting the above recommended solution down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution. For prolonged storage, dilute to working aliquots in a 0.1% BSA solution, store at -80°C and avoid repeat freeze thaws. Upon reconstitution, a small amount of visible precipitate can be expected. A 10% overfill has been added to the total material vial to compensate for this loss.



