

Recombinant Human IGF-1/IGF1 Protein (aa 52-118)(Active)

Catalog No. PKSH032595

Description

Synonyms	Insulin-Like Growth Factor I, IGF-I, Mechano Growth Factor, MGF, Somatomedin-C, IGF1, IBP1
Species	Human
Expression_host	E.coli
Sequence	Thr52-Ala118
Accession	P05019
Mol_Mass	7.3 kDa
AP_Mol_Mass	9 kDa
Tag	None
Bio_activity	Measured in a serum-free cell proliferation assay using MCF-7 human breast cancer cells. The ED50 for this effect is 52. 4 ng/ml.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.5 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of 300mM NaAc, pH 6.5. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Background

Insulin-like growth factor I (IGF1) belongs to the family of insulin-like growth factors that are structurally homologous to proinsulin. Mature IGFs are generated by proteolytic processing of inactive precursor protein containing N-terminal and C-terminal propeptide regions. Mature human IGF-I consisting of 70 amino acids with 94% identity with mouse IGF1 and exhibits cross-species activity. IGF1 binds IGF-1R; IGF-2R; and the insulin receptor and plays a key role in cell cycle progression; cell proliferation and tumor progression. IGF1 expression is regulated by growth hormone.

SDS-PAGE

