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

Catalog Number: PKSH032595

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

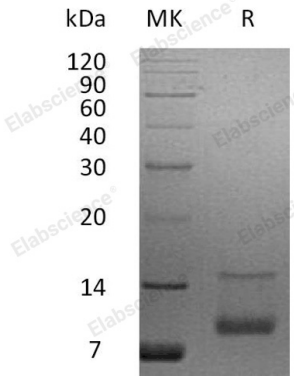
Description

Species	Human
Source	E.coli-derived Human IGF-1;IGF1 protein Thr52-Ala118
Calculated MW	7.3 kDa
Observed MW	9 kDa
Accession	P05019
Bio-activity	Measured in a serum-free cell proliferation assay using MCF- 7 human breast cancer cells. The ED_{50} for this effect is 20-100 ng/ml.

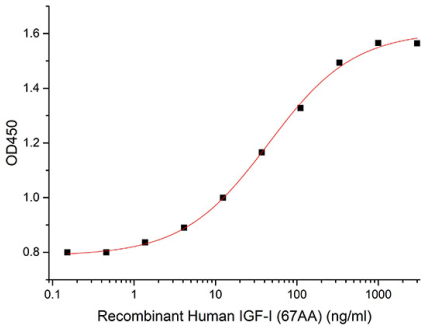
Properties

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 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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 20mM NaAc-HAc, pH 4.5 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 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.

Data



> 95 % as determined by reducing SDS-PAGE.



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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.