

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

**Catalog Number:** PKSH032595

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

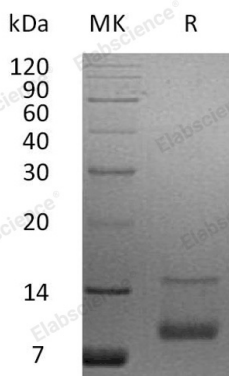
### Description

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

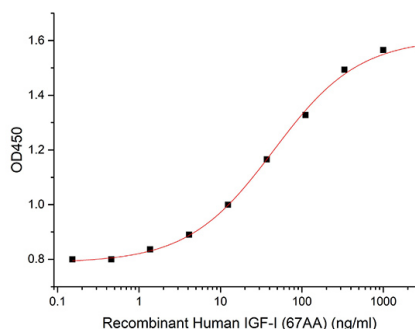
### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 0.5 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	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.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



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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.

### For Research Use Only