

**IGF-I/Somatamedin C/IGF-IA, Human, Recombinant**

Cat. No. : PCK016

**General Information**

<b>Synonyms</b>	Somatamedin C;IGF-IA
<b>Species</b>	Human
<b>Expression host</b>	E.coli
<b>Sequence</b>	MGPETLCGAELVDALQFVCGDRGFYFNKPTGYGSSRRAPQTGIVDECCFRSCDLRRLREMYCA PLKPAKSA with polyhistidine tag at the C-terminus.
<b>Accession</b>	P05019.1
<b>Tag</b>	His-tag at the C-terminus
<b>Mol mass</b>	8.59 kDa
<b>Expiration date</b>	12 months
<b>Bio activity</b>	Measure by its ability to induce MCF-7 cells proliferation. The ED50 for this effect is 0.9-3.1 ng/mL. The specific activity of recombinant human IGF-I is approximately > 1.2 × 10 <sup>3</sup> IU/mg.

**Product feature**

<b>Purity</b>	> 95% as determined by SDS-PAGE. Ni-NTA chromatography.
<b>Endotoxin (EU/μg)</b>	< 0.1
<b>Storage</b>	Lyophilized protein should be stored at -5~-20°C for 1 year. Upon reconstitution, store at 2-8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10% FBS, 5% HSA or 5% trehalose solution), protein aliquots should be stored at -5~-20°C or -80°C for 3-6 months.
<b>Shipping</b>	Ice bag
<b>Formulation</b>	The protein was lyophilized from a 0.2 μm filtered solution containing 1 × PBS, pH 7.4.
<b>Reconstitution</b>	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 100 μg/mL. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

**Background**

Insulin-like growth factor 1 (IGF-1), also called somatomedin C, is a protein that in humans is encoded by the IGF1 gene. IGF-1 is a hormone similar in molecular structure to insulin. It plays an important role in childhood growth and continues to have anabolic effects in adults. A synthetic analog of IGF-1, mecasermin, is used for the treatment of growth failure.