

## Recombinant Human IGF-II

Catalog#:P00155 Derived from *E.coli*

<b>DESCRIPTION</b>	Recombinant Human Long Insulin-Like Growth Factor II is produced by our <i>E.coli</i> expression system and the target gene encoding Ala25-Glu91 is expressed. <b>Accession#:</b> P01344 <b>Known as:</b> Insulin-Like Growth Factor II; IGF-II; Somatomedin-A; IGF2; PP1446
<b>FORMULATION</b>	Lyophilized from a 0.2 $\mu$ m filtered solution of 20mM Glycine-HCl, 4% Sucrose, 4% Mannitol, 0.02% Tween 80 (w/v), pH3.0.
<b>SHIPPING</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
<b>STORAGE</b>	Lyophilized protein should be stored at $\leq -20^{\circ}\text{C}$ , stable for one year after receipt. Reconstituted protein solution can be stored at 2-8 $^{\circ}\text{C}$ for 2-7 days. Aliquots of reconstituted samples are stable at $\leq -20^{\circ}\text{C}$ for 3 months.
<b>RECONSTITUTION</b>	<i>Always centrifuge tubes before opening. Do not mix by vortex or pipetting.</i> <i>It is not recommended to reconstitute to a concentration less than 100<math>\mu\text{g/ml}</math>.</i> Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
<b>QUALITY CONTROL</b>	<b>Mol Mass:</b> 8.91kDa <b>AP Mol Mass:</b> 11kDa, reducing conditions. <b>Purity:</b> Greater than 95% as determined by reducing SDS-PAGE. <b>Endotoxin:</b> Less than 0.1ng/ $\mu\text{g}$ (1 EU/ $\mu\text{g}$ ) as determined by LAL test.
<b>BACKGROUND</b>	Insulin-Like Growth Factor II (IGF2) belongs to the insulin family of polypeptide growth factors that is involved in development and growth. Members of this family are structurally homologous to proinsulin, and share higher sequence identity. IGF2 is expressed only from the paternally inherited allele and believed to be secreted by the liver and to circulate in the blood. IGF2 possess growth-promoting activity and can stimulate the proliferation and survival of various cell types including muscle, bone, and cartilage tissue in vitro. IGF2 is influenced by placental lactogen and may play a role in fetal development.

