

**BACKGROUND**

Insulin like Growth Factor II, IGF-II, is a major growth hormone made by Theca cells during gestation. While IGF-II is known to engage the IGF-I receptor (IGF1R) to mediate embryonic growth, IGF-II is also known to bind the IGF-II receptor (IGF2R), which is thought to be signaling dead receptor that acts as a sink by binding up free IGF-II.

Recombinant Human IGF-II is non-glycosylated protein containing 67 amino acids and having a molecular mass of 7.5 kDa.

**Alternative Names:**

Somatamedin A

**Amino Acid Sequence:**

AYRPSETLCG GELVDTLQFV CGDRGFYFSR PASRVSRRSR  
GIVECCFRS CDLALLETYC ATPAKSE

**TECHNICAL INFORMATION**

**Source:** *E.coli*

**Physical Appearance:**

Sterile Filtered white lyophilized (freeze-dried) powder.

**Formulation:**

Recombinant human IGF-II is lyophilized with no additives.

**Stability:**

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

**Reconstitution:**

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

**Protein Content and Purity determined by:**

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

**Endotoxin Level:**

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

**Biological Activity:**

The activity is calculated by the dose dependent proliferation of MCF-7 cells and is typically 1.5-6 ng/mL.

*Products are for research use only. They are not intended for human, animal, or diagnostic applications.*

