

IGF-II

Catalog # PVGS1339

### Specification

## IGF-II - Product Information

Primary Accession Species Human

Sequence Ala25-Glu91, expressed with an N-terminal Met

Purity

> 95% as analyzed by SDS-PAGE<br>> 95% as analyzed by HPLC

**Endotoxin Level** < 0.2 EU/ μg of protein by gel clotting method

**Biological Activity** 

ED < sub > 50 < /sub > < 20.0 ng/ml, measured by a cell proliferation assay using FDCP-1 cells, corresponding to a specific activity of  $> 5.0 \times 10 < sup > 4 < /sup > units/mg$ .

P01344-1

Expression System E. coli

Formulation

Lyophilized after extensive dialysis against 25 mM Tris, pH 8.0.

Reconstitution

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in  $ddH_2O$  up to 100 µg/ml.

#### Storage & Stability

Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

#### **IGF-II - Additional Information**

#### Target Background

Insulin-like Growth Factor II (IGF-II) is a single chain 7 kDa polypeptide, and shares a high degree of homology with insulin. During circulation in vivo, IGF-II is complexed to high affinity binding proteins, IGF Binding Proteins (IGFBP), which act as circulating reservoirs, transport IGF-II, and prolong the half life of IGF-II. The receptors of IGF-II (IGFRs) are transmembrane tyrosine receptors, and are heterotetrameric consisting of two  $\alpha$ -subunits and two  $\beta$ -subunits. IGFRs execute their role via intracellullar signaling molecules, such as IRS, shc, and PI3K. The functions of IGF-II include promoting cell survival, growth, proliferation, differentiation and motility. In particular, IGF-II promotes proliferation, inhibits death, and stimulates transformation in breast cancer cells.



# **IGF-II - Protein Information**

## **IGF-II - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- <u>Flow Cytomety</u>
- <u>Cell Culture</u>

IGF-II - Images