

IGF1/IGF-I Protein, Salmon, Recombinant

General Information

Synonyms:	Somatomedin;IGF-1;Insulin-like growth factor I;IGF1
Protein Construction:	Gly45-Ala114
Species:	Salmon
Expression Host:	E. coli
Accession:	Q02815
Molecular Weight:	7.7 kDa (Predicted); 8.0 kDa (Reducing conditions)

QC Testing

Biological Activity:	ED 50 < 15.0 ng/ml as determined by a dose-response proliferation assay using FDC-P1 cells. Based on the ED 50, the calculated specific activity is approximately $>6.7 \times 10^4$ units/mg. It is recommended to experimentally determine the optimal concentration for each specific application by performing a dose response assay.
Purity:	$\geq 95\%$ as determined by SDS-PAGE
Endotoxin:	< 0.2 EU/ μ g of protein as determined by the LAL method.
Formulation:	Lyophilized from a 0.2 μ m filtered solution in PBS.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in sterile deionized water. The product concentration should not be less than 100 μ g/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

Upon receiving, the lyophilized product remains stable for up to 6 months at lower than -70 °C. Upon reconstitution, the product is stable for up to 1 week at 4 °C or up to 3 months at -20 °C. Avoid repeated freeze-thaw cycles by making single-use aliquots before the solution is stored at -20 °C.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Insulin-like growth factor 1 (IGF-1), also called Somatomedin, is a hormone similar in molecular structure to insulin but has a much higher growth-promoting activity. IGF-1 consists of 70 amino acids in a single chain with three intramolecular disulfide bridges. IGF-1 may be a physiological regulator of [1-14C]-2-deoxy-D-glucose (2DG) transport and glycogen synthesis in osteoblasts. It is able to stimulate glucose transport in bone-derived osteoblastic (PyMS) cells and is effective at much lower concentrations than insulin, not only regarding glycogen

and DNA synthesis but also with regard to enhancing glucose uptake. It may also play a role in synapse maturation.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481