



Recombinant Human DES1-3/IGF1
(rhDES1-3/IGF1)
Catalog #105-01B

Product Description

Human Des(1-3)Insulin-like Growth Factor-I (IGF-I) is a 67 amino acid analog of human IGF-I lacking the N-terminal tripeptide Gly-Pro-Glu. Human Des(1-3)IGF-I is more potent than IGF-I in vitro and in vivo. This increased potency is due to reduced binding of human Des(1-3)IGF-I to most of the IGF binding proteins which normally inhibit the biological actions of IGF-I. Human Des(1-3)IGF-I binds to the Type 1 IGF receptor with similar affinity to full length IGF-I.

Synonyms

DES1-3 IGF-I, DES(1-3) IGF-1, IGF-I DES(1-3), DES1-3/Insulin-Like Growth factor I.

AA Sequence

TLCGAELVDALQFVCGDRGFYFNKPTGYGSSRRAPQTGIVDECCFRSCDLRRLEMYCA
PLKPAKSA

Specifications

- **Source** *Escherichia coli*
- **Molecular Weight** 7.4 kDa
- **Formulation** Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4.
- **Purity** >97% by SDS-PAGE and HPLC analyses.
- **Physical Appearance** Sterile Filtered White lyophilized (freeze-dried) powder.
- **Biological Activity** The ED₅₀ was determined by a cell proliferation assay using serum free human MCF-7 cells is less than 2 ng/ml, corresponding to a specific activity of >5×10⁵ IU/mg.
- **Endotoxin** Less than 1 EU/µg of rHuDES1-3/IGF1 as determined by LAL method.

Reconstitution

- Briefly centrifuge prior to opening.
- Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Do not mix by vortex or pipetting.
- Aliquot the reconstituted solution to minimize freeze/thaw cycles.

Storage

- Lyophilized protein should be stored at < -20°C.
- Reconstituted protein solution can be stored at 4°C for 2-7 days.
- For maximal stability, store aliquots of reconstituted samples at < -20 to -80°C in a manual defrost freezer. Avoid repeated freeze-thaw cycles.

Product Use

rhDES1-3/IGF1 is for research use only. It is not approved for human or animal use, or for application in clinical or *in vitro* diagnostic procedures.