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Product Information

SILu™Prot Insulin-like Growth Factor I, human recombinant, expressed in *E. coli*SIL MS Protein Standard, ¹⁵N-labeled

Catalog Number **MSST0063** Storage Temperature –20 °C

Product Description

SILu[™]Prot Insulin-like Growth Factor I (IGF1) is a recombinant, ¹⁵N stable isotope-labeled protein, expressed in *E. coli*. IGF1 is a small protein consisting of 70 amino acids and three disulfide bonds.

Туре	¹⁵ N labeled IGF1 *	Native IGF1**	Measured/ Theoretical IGF1***
Non-reduced	7740.0	7742.7	91.3/94.0

^{*} Average mass measured on qTOF mass spectrometer

Each vial contains 10–20 µg of labeled SILu™Prot IGF1 lyophilized from a solution of 0.5 mM methionine in 2% acetic acid. Vial content was determined by BCA assay.

UniProt: P05019 (Gly 49-Ala118)

Sequence Information:

GPETLCGAELVDALQFVCGDRGFYFNKPTGYGSSSR RAPQ TGIVDECCFRSCDLRRLEMYCAPLKPAKSA

Formula (non-reduced): C₃₃₁H₅₁₂N₉₄O₁₀₁S₇

Molecular mass of ¹⁵N labeled non-reduced protein: 7742.7 (7648.7 + 94 ¹⁵Ns)

<u>Purity</u>: ≥95% (HPLC)

Heavy nitrogen incorporation efficiency: ≥97% (MS)

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein with 2% acetic acid to a final concentration of 100 μ g/ml. In order to minimize oxidation, 2 mM methionine may be added to the reconstitution solution.

Storage/Stability

Store the lyophilized product at –20 °C. The product is stable for at least 2 years as supplied.

After reconstitution, it is recommended to store the protein in working aliquots at –20 °C.

SILu is a trademark of Sigma-Aldrich Co. LLC.

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Legal Information

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^{**} Theoretical average mass

^{***} Theoretical mass shift assuming 100% ¹⁵N incorporation