



LD Biopharma, Inc.
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- PRODUCT DATA SHEET -

Name of Product: Recombinant Human Glis1-11R Protein
Catalog Number: hTF-0350
Manufacturer: LD Biopharma, Inc.

Introduction

Human Glis1 (Zinc Finger protein GLIS1) encodes a member of the GLI (MIM 165220) related Kruppel-like zinc finger protein that functions as an activator and repressor of transcription. Recent publication indicated that Glis1 plays a very important role in generation of induced pluripotent stem cells.

Full length recombinant human Glis1 protein was constructed with C-terminal tag of 11 arginine domain, which efficiently delivery protein intracellularly. This protein was expressed in *E. coli* as inclusion bodies, refolded using our unique “temperature shift inclusion body refolding” technology and chromatographically purified. Incubating this protein in culture mediums at concentration of 2 – 8 ug/ml may be used for studying of human direct reprogramming of somatic cells.

Gene Symbol: Glis1
Accession Number: NP_671726
Species: Human
Size: 50 µg / Vial
Composition: 0.5 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, arginine, DTT and Glycerol.
Storage: In Liquid. Keep at -20°C for long term storage. Product is stable at 4 °C for at least 7 days.

Key References

Maekawa, M., et al. *Direct reprogramming of somatic cells is promoted by maternal transcription factor Glis1*. Nature 474 (7350), 225-229 (2011),



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Hongyan Zhou, et al. *Generation of Induced Pluripotent Stem Cells Using Recombinant Proteins*. Cell Stem Cell. 4: 381-384 (2009).

Applications

1. Protein transduction for in vitro somatic cell reprogramming study.
2. Active recombinant protein, may be used for DNA / protein binding assay.
3. As specific protein substrate for MAP kinase assay.
4. As immunogen for specific antibody production.

Quality Control

1. Purity: > 90% by SDS-PAGE.
2. DNA binding activity: Not tested yet.

Recombinant Protein Sequence

29aa_Tag_AEARTSLSAHCRGPLATGLHPDLLPGRSLATPAPSCYLLGSEPSSGLGLQPETH
LPEGSLKRCCVLGLPPTSPASSSPCASSDVTSIIRSSQTSLVTCVNGLRSPPLTGDLGGPSKRA
RPGPASTDSHEGSLQLEACRKASFLKQEPADFSELFQPHQQGLPPPYPLSQLPPGPSLGGGLGL
GLAGRVVAGRQACRWVDCCAAYEQQEELVRHIEKSHIDQRKGEDFTCFWAGCVRRYKPFNARYK
LLIHMRVHSGEKPKNKCMFEGCSKAFSRLENLKIHLRSHTGEKPYLCQHGPCQKAFSNSSDRAKH
QRTHLDTKPYACQIPGCSKRYTDPSSLRKHVKAHSAKEQQVRKKLHAGPDTEADVLTCLVLLQQ
LHTSTQLAASDGKGGCGLGQELLPGVYPGSITPHNGLASGLLPPAHDVPSRHHPLDATTS SHHH
LSPLPMAESTRDGLGPGLLSPIVSPKGLGPPPLPPSSQSHSPGGQPFPTLPSKPSYPPFQSP
PPPLPSPQGYQGSFHSIQSCFPYGD CYRMAEPAAGGDGLVGETHG FNPLRPNGYHSLSTPLPAT
GYEALAEASCPTALPQQPSEDVVSSGPEDCGFFPNGAFDHCLGHIPSIYTDTTLEESGGGGSPGR
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