



LD Biopharma, Inc.
9924 Mesa Rim Road Suite B
San Diego, CA 92121
Tel: 858-876-8266
<http://www.ldbiopharma.com>

- PRODUCT DATA SHEET -

Name of Product: Recombinant Human FoxA3-11R Protein
Catalog Number: hTF-0103
Manufacturer: LD Biopharma, Inc.

Introduction

Human FoxA3 (HNF3G) encodes a member of the forkhead class of DNA-binding proteins. These hepatocyte nuclear factors are transcriptional activators for liver-specific transcripts such as albumin and transthyretin, and they also interact with chromatin. Similar family members in mice have roles in the regulation of metabolism and in the differentiation of the pancreas and liver.

Recombinant human FoxA3 (HNF3G) 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 µg/ml may be used for studying of human liver cell differentiation in vitro.

Gene Symbol: FoxA3 (HNF3G, TCF3G, KHH3 MGC10179)
Accession Number: NP_004488.2
Species: Human
Size: 50 µg / Vial
Composition: 1.0 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

Thomas Vierbuchen et al. *Direct conversion of fibroblasts to functional neurons by defined factors*. NATURE. Vol 463/25: 1035 – 1038 (2010)



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Hongyan Zhou, et al. *Generation of induced pluripotent stem cells using recombinant protein*. Cell Stem Cell. Vol 4. Issue 5: 381-384 (2009)

Vladimir Torchilin. Intracellular delivery of protein and peptide therapeutics. Drug Discovery Today: Technologies. 01.002 (2009)

Applications

1. Protein transduction for study of Human liver cell differentiation in vitro.
2. Active recombinant protein, may be used for ELISA based DNA/Protein binding assay.
3. As specific protein substrate for kinase assay.
4. Immunogen for specific antibody production.

Quality Control

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

Recombinant Protein Sequence

29aa_Tag_GEF LGSVKMEAHDLAEWSYYPEAGEVYSPVTPVPTMAPLNSYMTLNPLSSPYPPGG
LPASPLPSGPLAPPAPAAPLGPTFPGLGVSGGSSSSGYGAPGPGLVHGKEMPKGYRRPLAHAKP
PYSYISLITMAIQQAPGKMLTLSEIYQWIMDLFPYYRENQQRWQNSIRHLSLNFNDCFVKVARSP
DKPGKGSYWALHPSSGNMFENGCYLRRQKRFKLEEKVKKGGSGAATTTTRNGTGSAASTTTTPAAT
VTSPPPQPPPPAPEPEAQGGEDVGALDCGSPASSTPYFTGLELPGELKLDAPYNFNHPFSINNLN
SEQTPAPPKLDVGFGGYGAEGGEPGVYYQGLYSRSLNLS**LEESGGGGSPGRRRRRRRRRRR**