



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 Runx1-11R Protein
Catalog Number: hTF-0070
Manufacturer: LD BioPharma, Inc.

Introduction

Human Runx1 (AML1a) functions as a heterodimeric transcription factor that binds to the core element of many enhancers and promoters. The protein encoded by this gene represents the alpha subunit of CBF and is thought to be involved in the development of normal hematopoiesis. Chromosomal translocations involving this gene are well-documented and have been associated with several types of leukemia. Three transcript variants encoding different isoforms have been found for Runx1 gene.

Recombinant human Runx1 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 hematopoietic cell differentiation in vitro or various cancer researches.

Gene Symbol: Runx1 (AML1a)
Accession Number: NP_001116079
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

Nisson,P.E., et al. *Transcriptionally active chimeric gene derived from the fusion of the AML1 gene and a novel gene on chromosome 8 in t(8;21) leukemic cells.* Cancer Genet. Cytogenet. 63. (2), 81-88 (1992)



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

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

Applications

1. Protein transduction for hematopoietic cell differentiation.
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_RIPVDASTSRRFTPPSTALSPGKMSEALPLGAPDAGAALAGKLRSGDRSMVEVLA
DHPGELVRTDSPNFLCSVLPTHWRCNKTLPIAFKVVALGDVPDGLVTVMAGNDENYSaelRNA
TAAMKNQVARFNDLRFVGRSGRGKSFTLTITVFTNPPQVATYHRAIKITVDGPREPRRHRQKLD
DQTKPGSLSFSERLSELEQLRRTAMRVSPHHPAPTPNPRASLNHSTAFNPQPQSQMQEEDTAPW
RCLEESGGGGSPGRRRRRRRRRRR