



LD Biopharma, Inc.
9924 Mesa Rim Road Suite B
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- PRODUCT DATA SHEET -

Name of Product: Recombinant Human KLF3 Protein
Catalog Number: hTF-1067
Manufacturer: LD Biopharma, Inc.

Introduction

Human KLF3 is a member of Sp/KLF zinc finger protein family with diverse functions. Krüppel-like factor (KLF) family members can function as either activators or repressors depending on the promoters they bind and the cellular proteins they interact with. Human KLF3, when interacts with Ctbp becomes a transcriptional repressor for regulating KLF1 gene transcription in erythroid cell differentiation. Recent data indicated that KLF3 is a critical regulator for B cell development.

Full-length human KLF3 cDNA (345aa) was constructed with codon optimization and expressed with a small T7-His-TEV cleavage site Tag (29aa) fusion at its N-terminal. This protein is expressed in E.coli as inclusion bodies. The final product was refolded using our unique “temperature shift inclusion body refolding” technology and chromatographically purified.

Gene Symbol: KLF3 (BKLF)
Accession Number: NP_057615.3
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 -80°C for long term storage. Product is stable at 4 °C for at least 30 days.

Key References

Vu, T.T., et al., *Impaired B cell development in the absence of Kruppel-like factor 3*. J. Immunol. 187 (10), 5032-5042 (2011)



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Humbert, M., et al., *Deregulated expression of Kruppel-like factors in acute myeloid leukemia*. Leuk. Res. 35 (7), 909-913 (2011)

Applications

1. May be used for in vitro KLF3 mediated B cell differentiation regulation study with “ProFectin” based intracellular delivery of this protein.
2. May be used as specific substrate protein for kinase and ubiquitin (Sumo pathway) related enzyme functional screening assays.
3. May be used for protein-protein interaction mapping
4. As antigen for specific antibody production.

Quality Control

Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHGNLYFQGGEFLMFDPVPVKQEAMDPVSVSYPNSYMESMKPNKYGV
IYSTPLPEKFFQTPEGLSHGIQMEPVDLTVNKRSSPPSAGNSPSSLKFPSSHRRASPGLSMPSS
SPPIKKYSPPSPGVQPFVPLSMPPVMAAALS RHGIRSPGILPVIQPVVVQPVPFMYTSHLQQP
LMVSLSEEMENSSSSMQVPVIESYEKPI SQKKIKIEPGIEPQRTDYYPEEMSPPLMNSVSPPQA
LLQENHPSVIVQPGKRPLPVESPD TQRKRRIHRCDYDGCNKVYTKSSHLKAHRRTH TGEKPYKC
TWE GCTWK FAR SDELTRHFRKHTG I KPFQCPDCDRSFSRSDHLALHRKRHMLV