



LD Biopharma, Inc.
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- PRODUCT DATA SHEET -

Name of Product: Recombinant Human KLF17 Protein
Catalog Number: hTF-1061
Manufacturer: LD Biopharma, Inc.

Introduction

KLF17 (ZNF393) 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. They are critical regulators of various cellular processes including reprogramming of differentiated cells to stem cells, erythropoiesis and cell survival. Moreover, some KLF family members have been implicated in tumor development. The murine homologue of KLF17 is believed to play a role in gametogenesis and early embryogenesis based on its expression in early embryos, testes and ovary. Recently, KLF17 has been demonstrated to be involved in the negatively regulation of breast cancer metastasis.

Full-length human KLF17 cDNA (389aa) 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: KLF17 (ZFP393; RP4-675G8.1)
Accession Number: NP_775755
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.



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Key References

Gumireddy, K., et al., *KLF17 is a negative regulator of epithelial-mesenchymal transition and metastasis in breast cancer*. Nat. Cell Biol. 11 (11), 1297-1304 (2009)

Cai, X.D., et al., *Reduced expression of Kruppel-like factor 17 is related to tumor growth and poor prognosis in lung adenocarcinoma*. Biochem. Biophys. Res. Commun. 418 (1), 67-73 (2012)

Applications

1. May be used for in vitro mediated tumor cell metastasis pathway 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. Potential biomarker protein when combined with Id1 protein for lymph node metastasis in breast cancer diagnosis.
5. As antigen for specific antibody production.

Quality Control

Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHGNLYFQGGEFYGRPQAEMEQEAGELSRWQAAHQAAQDNENSAPIL
NMSSSSGSSGVHTSWNQGLPTIQHFPHSAEMLGSPLVSVEAPGQNVNEGQPQFSMPLPERGMSY
CPQATLTPSRMIYCQRMSPPPQEMTIFSGPQLMPVGEPNIPRVARPFGGNLRMPPSGLPVSAST
GIPIMSHTGNPPVPYPGLSTVPSDETLGPTVPSTEAQAVLPSMAQMLPPQDAHDLGMPPAESQ
SLLVLGSQDSLVSQPDSQEGPFLPEQP GPAPQTVEKNSRPQEGTGRRGSSSEARPYCCNYENC GK
AYTKRSHLVSHQRKHTGERPYSCNWESCSWSFFRSDELRRHMRVHTRYRYPYKCDQCSREFMRS D
HLKQH QKTHRPGPSDPQANNNGEQDSPPAAGP