

# LKLF (H-60): sc-28675

## BACKGROUND

The Krüppel-type zinc finger transcription factors comprise a conserved family of DNA binding proteins that are important in developmental regulation. The Krüppel zinc finger transcription factor was initially identified in *Drosophila* as a segmentation gene. Krüppel-like factors that have been characterized in mammals include erythroid Krüppel-like transcription factor (EKLF), lung Krüppel-like transcription factor (LKLF) and gut Krüppel-like transcription factor (GKLF). EKLF is expressed principally in erythroid tissues, and LKLF expression is limited to the lung. GKLF is found predominantly in gut and has been shown to be expressed during growth arrest. In the developing mouse embryo, LKLF is necessary for normal tunica media formation and blood vessel stabilization. LKLF is also sufficient to program quiescence in T cells by negatively regulating the c-Myc-dependent pathway. The gene for human LKLF maps to chromosome 19p13.11.

## CHROMOSOMAL LOCATION

Genetic locus: KLF2 (human) mapping to 19p13.11; Klf2 (mouse) mapping to 8 B3.3.

## SOURCE

LKLF (H-60) is a rabbit polyclonal antibody raised against amino acids 1-60 mapping at the N-terminus of LKLF of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-28675 X, 200 µg/0.1 ml.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

LKLF (H-60) is recommended for detection of LKLF of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); may cross-react with GKLF.

Suitable for use as control antibody for LKLF siRNA (h): sc-35818, LKLF siRNA (m): sc-35819, LKLF shRNA Plasmid (h): sc-35818-SH, LKLF shRNA Plasmid (m): sc-35819-SH, LKLF shRNA (h) Lentiviral Particles: sc-35818-V and LKLF shRNA (m) Lentiviral Particles: sc-35819-V.

LKLF (H-60) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

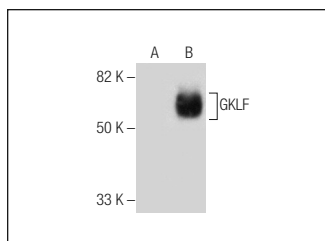
Molecular Weight of LKLF: 37 kDa.

Positive Controls: GKLF (h): 293T Lysate: sc-114641, A549 cell lysate: sc-2413 or U-937 cell lysate: sc-2239.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



LKLF (H-60): sc-28675. Western blot analysis of GKLF expression in non-transfected: sc-117752 (A) and human GKLF transfected: sc-114641 (B) 293T whole cell lysates.

## SELECT PRODUCT CITATIONS

- Bruce, S.J., et al. 2007. Dynamic transcription programs during ES cell differentiation towards mesoderm in serum versus serum-free BMP4 culture. *BMC Genomics* 8: 365.
- Makwana, O., et al. 2010. Exposure to low-dose trichloroethylene alters shear stress gene expression and function in the developing chick heart. *Cardiovasc. Toxicol.* 10: 100-107.
- Ebert, R., et al. 2012. Krüppel-like factors KLF2 and 6 and Ki-67 are direct targets of zoledronic acid in MCF-7 cells. *Bone* 50: 723-732.
- Macari, E.R., et al. 2013. Simvastatin and t-butylhydroquinone suppress KLF1 and Bcl11A gene expression and additively increase fetal hemoglobin in primary human erythroid cells. *Blood* 121: 830-839.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.


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Try **GKLF/EKLF/LKLF (F-8): sc-166238**, our highly recommended monoclonal alternative to LKLF (H-60). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **GKLF/EKLF/LKLF (F-8): sc-166238**.