

# LKLF (N-13): sc-18690

## 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 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near 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-18690 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-18690 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

LKLF (N-13) 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).

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 (N-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of LKLF: 37 kDa.

Positive Controls: A549 cell lysate: sc-2413, Jurkat nuclear extract: sc-2132 or 3T3-L1 cell lysate: sc-2243.

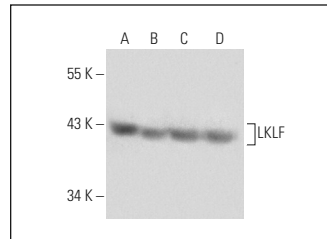
## RESEARCH USE

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

## STORAGE

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

## DATA



LKLF (N-13): sc-18690. Western blot analysis of LKLF expression in A549 (A), U-937 (B) and 3T3-L1 (C) whole cell lysates and mouse lung tissue extract (D).

## SELECT PRODUCT CITATIONS

- Wang, N., et al. 2006. Shear stress regulation of Krüppel-like factor 2 expression is flow pattern-specific. *Biochem. Biophys. Res. Commun.* 341: 1244-1251.
- Alhashem, Y.N., et al. 2011. Transcription factors KLF1 and KLF2 positively regulate embryonic and fetal  $\beta$ -globin genes through direct promoter binding. *J. Biol. Chem.* 286: 24819-24827.
- Gracia-Sancho, J., et al. 2011. Endothelial expression of transcription factor Krüppel-like factor 2 and its vasoprotective target genes in the normal and cirrhotic rat liver. *Gut* 60: 517-524.
- Pei, L., et al. 2011. Thyroid hormone receptor repression is linked to type I pneumocyte-associated respiratory distress syndrome. *Nat. Med.* 17: 1466-1472.
- Stern, A.R., et al. 2012. Isolation and culture of primary osteocytes from the long bones of skeletally mature and aged mice. *Biotechniques* 52: 361-373.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.


 MONOS  
Satisfaction  
Guaranteed

Try **GKLF/EKLF/LKLF (F-8): sc-166238**, our highly recommended monoclonal alternative to LKLF (N-13). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **GKLF/EKLF/LKLF (F-8): sc-166238**.