

GKLF/EKLF/LKLF (M-19): sc-1905

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 EKLF, LKLF and 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.

REFERENCES

- Schuh, R., et al. 1986. A conserved family of nuclear proteins containing structural elements of the finger protein encoded by Krüppel, a *Drosophila* segmentation gene. *Cell* 47: 1025-1032.
- Ollo, R., et al. 1987. *Drosophila* Krüppel gene product produced in a baculovirus expression system is a nuclear phosphoprotein that binds to DNA. *Proc. Natl. Acad. Sci. USA* 84: 5700-5704.
- Chavrier, P., et al. 1988. Characterization of a mouse multigene family that encodes zinc finger structures. *Mol. Cell. Biol.* 8: 1319-1326.
- Ruppert, J.M., et al. 1988. The GLI-Krüppel family of human genes. *Mol. Cell. Biol.* 8: 3104-3113.

SOURCE

GKLF/EKLF/LKLF (M-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of GKLF of mouse 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-1905 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-1905 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GKLF/EKLF/LKLF (M-19) is recommended for detection of multiple Krüppel-like factors including GKLF, EKLF and 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).

GKLF/EKLF/LKLF (M-19) is also recommended for detection of multiple Krüppel-like factors including GKLF, EKLF and LKLF in additional species, including equine, canine, bovine, porcine and avian.

GKLF/EKLF/LKLF (M-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

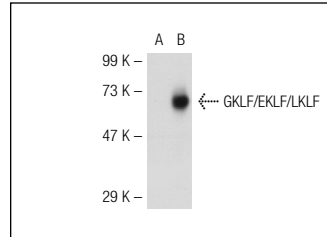
Molecular Weight of GKLF/EKLF/LKLF: 53 kDa.

Positive Controls: GKLF (m): 293T Lysate: sc-125385, GKLF (h): 293T Lysate: sc-114641 or HeLa nuclear extract: sc-2120.

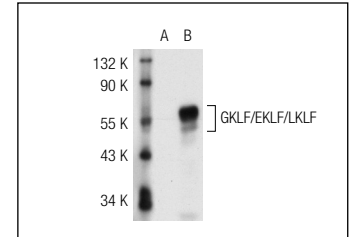
STORAGE

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

DATA



GKLF/EKLF/LKLF (M-19): sc-1905. Western blot analysis of GKLF expression in non-transfected: sc-117752 (A) and mouse GKLF transfected: sc-125385 (B) 293T whole cell lysates.



GKLF/EKLF/LKLF (M-19): sc-1905. Western blot analysis of GKLF/EKLF/LKLF expression in non-transfected: sc-117752 (A) and human GKLF transfected: sc-114641 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Blanchon, L., et al. 2001. Co-localization of KLF6 and KLF4 with pregnancy-specific glycoproteins during human placenta development. *Mech. Dev.* 105: 185-189.
- Bachir, L.K., et al. 2003. The rat pituitary promoter of the neuronal nitric oxide synthase gene contains an Sp1-, LIM homeodomain-dependent enhancer and a distinct bipartite gonadotropin-releasing hormone-responsive region. *Endocrinology* 144: 3995-4007.
- Neumann, P., et al. 2004. TNF α induces a decrease in eNOS promoter activity. *Am. J. Physiol. Lung Cell Mol. Physiol.* 286: 452-459.
- Wassmann, S., et al. 2007. Induction of p53 by GKLF is essential for inhibition of proliferation of vascular smooth muscle cells. *J. Mol. Cell. Cardiol.* 43: 301-307.
- Du, J.X., et al. 2010. A small ubiquitin-related modifier-interacting motif functions as the transcriptional activation domain of Krüppel-like factor 4. *J. Biol. Chem.* 285: 28298-28308.
- Madonna, S., et al. 2010. The IFN- γ -dependent suppressor of cytokine signaling 1 promoter activity is positively regulated by IFN regulatory factor-1 and Sp1 but repressed by growth factor independence-1b and Krüppel-like factor-4, and it is dysregulated in psoriatic keratinocytes. *J. Immunol.* 185: 2467-2481.

RESEARCH USE

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



Try **GKLF/EKLF/LKLF (F-8): sc-166238** or **GKLF (B-8): sc-393462**, our highly recommended monoclonal alternatives to GKLF/EKLF/LKLF (M-19). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **GKLF/EKLF/LKLF (F-8): sc-166238**.