

# EKLF (C-12): sc-27193

## 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 (6-8). 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

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- 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.
- 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.
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- Bieker, J.J. 1996. Isolation, genomic structure, and expression of human erythroid Krüppel-like factor (EKLF). *DNA Cell Biol.* 15: 347-352.
- Shields, J.M., et al. 1996. Identification and characterization of a gene encoding a gut-enriched Krüppel-like factor expressed during growth arrest. *J. Biol. Chem.* 271: 20009-20017.

## CHROMOSOMAL LOCATION

Genetic locus: KLF1 (human) mapping to 19p13.2; Klf1 (mouse) mapping to 8 C3.

## SOURCE

EKLF (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of EKLF 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.

Blocking peptide available for competition studies, sc-27193 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

EKLF (C-12) is recommended for detection of EKLF of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 EKLF siRNA (h): sc-37831, EKLF siRNA (m): sc-37832, EKLF shRNA Plasmid (h): sc-37831-SH, EKLF shRNA Plasmid (m): sc-37832-SH, EKLF shRNA (h) Lentiviral Particles: sc-37831-V and EKLF shRNA (m) Lentiviral Particles: sc-37832-V.

Molecular Weight (predicted) of EKLF: 33 kDa.

Molecular Weight (observed) of EKLF: 38 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203 or mouse spleen extract: sc-2391.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## SELECT PRODUCT CITATIONS

- Layon, M.E., et al. 2007. Expression of GATA-1 in a non-hematopoietic cell line induces β-globin locus control region chromatin structure remodeling and an erythroid pattern of gene expression. *J. Mol. Biol.* 366: 737-744.

## STORAGE

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

## PROTOCOLS

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



Try **GKLF/EKLF/LKLF (F-8): sc-166238**, our highly recommended monoclonal alternative to EKLF (C-12). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **GKLF/EKLF/LKLF (F-8): sc-166238**.