

GKLF (A-2): sc-166190

BACKGROUND

The Krüppel 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

1. 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.
2. Ollio, R. and Maniatis, T. 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.
3. Chavrier, P., et al. 1988. Characterization of a mouse multigene family that encodes zinc finger structures. *Mol. Cell. Biol.* 8: 1319-1326.
4. Ruppert, J.M., et al. 1988. The GLI-Krüppel family of human genes. *Mol. Cell. Biol.* 8: 3104-3113.

CHROMOSOMAL LOCATION

Genetic locus: KLF4 (human) mapping to 9q31.2.

SOURCE

GKLF (A-2) is a mouse monoclonal antibody raised against amino acids 1-180 of GKLF of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain 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-166190 X, 200 µg/0.1 ml.

APPLICATIONS

GKLF (A-2) is recommended for detection of GKLF of human origin by Western Blotting (starting dilution 1:100, 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 GKLF siRNA (h): sc-35480, GKLF shRNA Plasmid (h): sc-35480-SH and GKLF shRNA (h) Lentiviral Particles: sc-35480-V.

GKLF (A-2) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

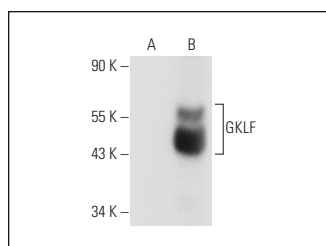
Molecular Weight of GKLF: 53 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, A-431 nuclear extract: sc-2122 or GKLF (h): 293T Lysate: sc-114641.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



GKLF (A-2): sc-166190. 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

1. Yuan, Y., et al. 2017. Palmatine attenuates isoproterenol-induced pathological hypertrophy via selectively inhibiting HDAC2 in rats. *Int. J. Immunopathol. Pharmacol.* 30: 406-412.
2. Wang, X., et al. 2019. The deubiquitinase USP10 regulates KLF4 stability and suppresses lung tumorigenesis. *Cell Death Differ.* E-published.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.



See **GKLF/EKLF/LKLF (F-8): sc-166238** for GKLF/EKLF/LKLF antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.