SANTA CRUZ BIOTECHNOLOGY, INC.

GKLF (C-6): sc-166101

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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

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. Ollo, 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.
5. Bray, P., et al. 1991. Characterization and mapping of human genes encoding zinc finger proteins. Proc. Natl. Acad. Sci. USA 88: 9563-9567.
6. Anderson, K.P., et al. 1995. Isolation of a gene encoding a functional zinc finger protein homologous to erythroid Krüppel-like factor: identification of a new multigene family. Mol. Cell. Biol. 15: 5957-5965.
7. Bieker, J.J. 1996. Isolation, genomic structure, and expression of human erythroid Krüppel-like factor (EKLF). DNA Cell Biol. 15: 347-352.
8. 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: KLF4 (human) mapping to 9q31.2.

SOURCE

GKLF (C-6) is a mouse monoclonal antibody raised against amino acids 1-180 of GKLF of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 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-166101 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

GKLF (C-6) 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 (C-6) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

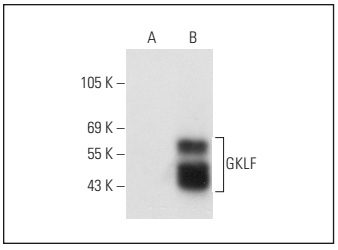
Molecular Weight of GKLF: 53 kDa.

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 (C-6): sc-166101. Western blot analysis of GKLF expression in non-transfected: sc-117752 (**A**) and human GKLF transfected: sc-114641 (**B**) 293T whole cell lysates.

RESEARCH USE

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

CONJUGATES

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.