SANTA CRUZ BIOTECHNOLOGY, INC.

GKLF (T-16): sc-12538

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The Kruppel-type zinc finger transcription factors comprise a conserved family of DNA binding proteins that are important in developmental regulation. The Kruppel zinc finger transcription factor was initially identified in *Drosophila* as a segmentation gene. Kruppel-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., Aicher, W., Gaul, U., Cote, S., Preiss, A., Maier, D., Seifert, E., Nauber, U., Schroder, C., and Kemler, R. 1986. A conserved family of nuclear proteins containing structural elements of the finger protein encoded by Kruppel, a *Drosophila* segmentation gene. Cell 47: 1025-1032.
2. Ollo, R. and Maniatis, T. 1987. *Drosophila* Kruppel 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. Ruppert, J.M., Kinzler, K.W., Wong, A.J., Bigner, S.H., Kao, F.T., Law, M.L., Seuanez, H.N., O'Brien, S.J., and Vogelstein, B. 1988. The GLI-Kruppel family of human genes. Mol. Cell Biol. 8: 3104-3113.
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5. Bray, P., Lichter, P., Thiesen, H.J., Ward, D.C., and Dawid, I.B. 1991. Characterization and mapping of human genes encoding zinc finger proteins. Proc. Natl. Acad. Sci. USA 88: 9563-9567.
6. Anderson, K.P., Kern, C.B., Crable, S.C., and Lingrel, J.B. 1995. Isolation of a gene encoding a functional zinc finger protein homologous to erythroid Kruppel-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 Kruppel-like factor (EKLF). DNA Cell Biol. 15: 347-352.

SOURCE

GKLF (T-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-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.

Blocking peptide available for competition studies, sc-12538 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-12538 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

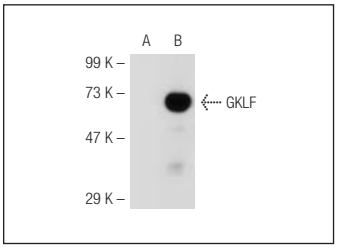
GKLF (T-16) is recommended for detection of GKLF of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2 µg per 100–500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for GKLF siRNA (h): sc-35480 and GKLF siRNA (m): sc-35479.

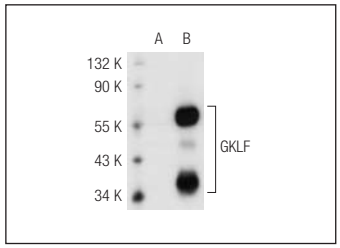
GKLF (T-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Positive Controls: mouse lung extract: sc-2390, mouse testis extract: sc-2405 or HeLa nuclear extract: sc-2120.

DATA



GKLF (T-16): sc-12538. Western blot analysis of GKLF expression in non-transfected: sc-117752 (**A**) and mouse GKLF transfected: sc-125385 (**B**) 293T whole cell lysates.



GKLF (T-16): sc-12538. 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. Nores, R., Blanchon, L., López-Díaz, F., Bocco, J.L., Patrito, L.C., Sapin, V. and Panzetta-Dutari, G.M. 2003. Transcriptional control of the human pregnancy-specific glycoprotein 5 gene is dependent on two GT-boxes recognized by the ubiquitous specificity protein 1 (Sp1) transcription factor. Placenta 25: 9-19.
2. Hamik, A., Lin, Z., Kumar, A., Balcells, M., Sinha, S., Katz, J., Feinberg, M.W., Gerzsten, R.E., Edelman, E.R. and Jain, M.K. 2007. Kruppel-like factor 4 regulates endothelial inflammation. J. Biol. Chem. 282: 13769-13779.

RESEARCH USE

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