

GKLF (H-180): sc-20691

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.

CHROMOSOMAL LOCATION

Genetic locus: KLF4 (human) mapping to 9q31.2; Klf4 (mouse) mapping to 4 B3.

SOURCE

GKLF (H-180) is a rabbit polyclonal antibody raised against amino acids 1-180 of GKLF 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-20691 X, 200 µg/0.1 ml.

GKLF (H-180) is available conjugated to agarose (sc-20691 AC), 500 µg/0.25 ml agarose in 1 ml, for IP.

APPLICATIONS

GKLF (H-180) 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).

GKLF (H-180) is also recommended for detection of GKLF in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GKLF siRNA (h): sc-35480, GKLF siRNA (m): sc-35479, GKLF shRNA Plasmid (h): sc-35480-SH, GKLF shRNA Plasmid (m): sc-35479-SH, GKLF shRNA (h) Lentiviral Particles: sc-35480-V and GKLF shRNA (m) Lentiviral Particles: sc-35479-V.

GKLF (H-180) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of GKLF: 53 kDa.

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

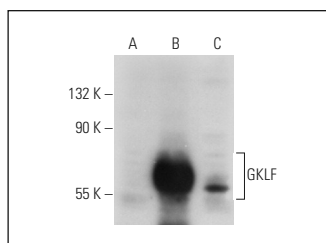
STORAGE

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

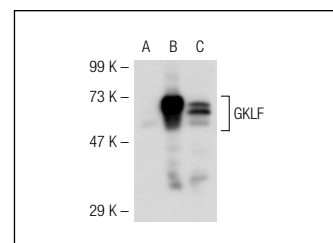
RESEARCH USE

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

DATA



GKLF (H-180): sc-20691. Western blot analysis of GKLF expression in non-transfected: sc-117752 (A) and human GKLF transfected: sc-114641 (B) 293T whole cell lysates and HeLa nuclear extract (C).



GKLF (H-180): sc-20691. Western blot analysis of GKLF expression in non-transfected 293T: sc-117752 (A), mouse GKLF transfected 293T: sc-125385 (B) and A-431 (C) whole cell lysates.

SELECT PRODUCT CITATIONS

- Kiang, J.G., et al. 2004. Geldanamycin treatment inhibits hemorrhage-induced increases in KLF6 and iNOS expression in unresuscitated mouse organs: role of inducible HSP 70. *J. Appl. Physiol.* 97: 564-569.
- Wang, H. 2004. The Krüppel-like KLF4 transcription factor, a novel regulator of urokinase receptor expression, drives synthesis of this binding site in colonic crypt luminal surface epithelial cells. *J. Biol. Chem.* 279: 22674-22683.
- Chen, H.F., et al. 2011. Surface marker epithelial cell adhesion molecule and E-cadherin facilitate the identification and selection of induced pluripotent stem cells. *Stem Cell Rev.* 7: 722-735.
- O'Reilly, L.P., et al. 2011. An unexpected role for the clock protein timeless in developmental apoptosis. *PLoS ONE* 6: e17157.
- Lin, C.C., et al. 2011. A KLF4-miRNA-206 autoregulatory feedback loop can promote or inhibit protein translation depending upon cell context. *Mol. Cell. Biol.* 31: 2513-2527.
- Bhave, V.S., et al. 2011. Genes inducing iPS phenotype play a role in hepatocyte survival and proliferation *in vitro* and liver regeneration *in vivo*. *Hepatology* 54: 1360-1370.
- Li, D., et al. 2011. KLF4-mediated negative regulation of IFITM3 expression plays a critical role in colon cancer pathogenesis. *Clin. Cancer Res.* 17: 3558-3568.
- Garcia-Lavandeira, M., et al. 2012. Craniopharyngiomas express embryonic stem cell markers (SOX2, OCT4, KLF4, and SOX9) as pituitary stem cells but do not coexpress RET/GFRA3 receptors. *J. Clin. Endocrinol. Metab.* 97: E80-E87.



Try **GKLF/EKLF/LKLF (F-8): sc-166238** or **GKLF (B-8): sc-393462**, our highly recommended monoclonal alternatives to GKLF (H-180). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **GKLF/EKLF/LKLF (F-8): sc-166238**.