

GKLF/EKLF/LKLF (F-8): sc-166238

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.

SOURCE

GKLF/EKLF/LKLF (F-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 449-481 at the C-terminus of GKLF of mouse 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-166238 X, 200 µg/0.1 ml.

GKLF/EKLF/LKLF (F-8) is available conjugated to agarose (sc-166238 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166238 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166238 PE), fluorescein (sc-166238 FITC), Alexa Fluor® 488 (sc-166238 AF488), Alexa Fluor® 546 (sc-166238 AF546), Alexa Fluor® 594 (sc-166238 AF594) or Alexa Fluor® 647 (sc-166238 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-166238 AF680) or Alexa Fluor® 790 (sc-166238 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-166238 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

GKLF/EKLF/LKLF (F-8) is recommended for detection of multiple Krüppel-like factors including GKLF, EKLF and LKLF of mouse, rat and 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).

GKLF/EKLF/LKLF (F-8) is also recommended for detection of multiple Krüppel-like factors including GKLF, EKLF and LKLF in additional species, including canine, bovine, porcine and avian.

GKLF/EKLF/LKLF (F-8) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of GKLF/EKLF/LKLF: 53 kDa.

Positive Controls: GKLF (h): 293T Lysate: sc-114641, A-431 nuclear extract: sc-2122 or GKLF (m): 293T Lysate: sc-125385.

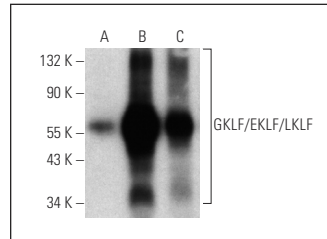
RESEARCH USE

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

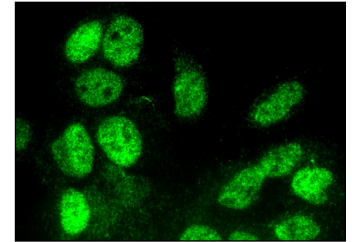
STORAGE

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

DATA



GKLF/EKLF/LKLF (F-8): sc-166238. Western blot analysis of GKLF/EKLF/LKLF expression in non-transfected: sc-117752 (A), human GKLF transfected: sc-114641 (B) and mouse GKLF transfected: sc-125385 (C) 293T whole cell lysates.



GKLF/EKLF/LKLF (F-8): sc-166238. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear localization.

SELECT PRODUCT CITATIONS

- Su, C., et al. 2014. ERK5/KLF4 signaling as a common mediator of the neuroprotective effects of both nerve growth factor and hydrogen peroxide preconditioning. *Age* 36: 9685.
- Di Stefano, B., et al. 2018. Reduced MEK inhibition preserves genomic stability in naive human embryonic stem cells. *Nat. Methods* 15: 732-740.
- Cornacchia, D., et al. 2019. Lipid deprivation induces a stable, naive-to-primed intermediate state of pluripotency in human PSCs. *Cell Stem Cell* 25: 120-136.e10.
- Liang, Y.C., et al. 2020. Folding keratin gene clusters during skin regional specification. *Dev. Cell* 53: 561-576.e9.
- Khoa, L.T.P., et al. 2020. Histone acetyltransferase MOF blocks acquisition of quiescence in ground-state ESCs through activating fatty acid oxidation. *Cell Stem Cell* 27: 441-458.e10.
- Ma, C., et al. 2021. Calycosin ameliorates atherosclerosis by enhancing autophagy via regulating the interaction between KLF2 and MLKL in apoE^{-/-} mice. *Br. J. Pharmacol.* 179: 252-269.
- Moonen, J.R., et al. 2022. KLF4 recruits SWI/SNF to increase chromatin accessibility and reprogram the endothelial enhancer landscape under laminar shear stress. *Nat. Commun.* 13: 4941.
- Chen, T., et al. 2022. LncRNA Airn maintains LSEC differentiation to alleviate liver fibrosis via the KLF2-eNOS-sGC pathway. *BMC Med.* 20: 335.
- Sharma, P., et al. 2022. HDAC5 RNA interference ameliorates acute renal injury by upregulating KLF2 and inhibiting NALP3 expression in a mouse model of oxalate nephropathy. *Int. Immunopharmacol.* 112: 109264.

PROTOCOLS

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

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