

KLF3 (H-8): sc-393041

BACKGROUND

Krüppel-like factors (KLFs) comprise a family of evolutionarily conserved zinc finger-containing transcription factors with diverse regulatory functions in cell growth, proliferation, differentiation and embryogenesis. Individual members of the Sp1-like/KLF family can function either as activators or repressors, depending on which promoter they bind and the coregulators with which they interact. KLF6, also designated Zf9 or CPBP (core promoter-binding protein), and KLF3 are Krüppel-like zinc finger containing transcription factors. KLF6 is rapidly induced during hepatic stellate cell activation and transactivates a reporter gene driven by the collagen I promoter, suggesting KLF6 plays a role in the response to tissue injury. KLF3 may play a role in hematopoiesis.

REFERENCES

1. van Vliet, J., et al. 2000. Human Krüppel-like factor 8: a CACCC-box binding protein that associates with CtBP and represses transcription. *Nucleic Acids Res.* 28: 1955-1962.
2. Kaczynski, J., et al. 2003. Sp1- and Krüppel-like transcription factors. *Genome Biol.* 4: 206.
3. Turner, J., et al. 2003. The LIM protein FHL3 binds basic Krüppel-like factor/Krüppel-like factor 3 and its co-repressor C-terminal-binding protein 2. *J. Biol. Chem.* 278: 12786-12795.
4. Yang, X.O., et al. 2003. Regulation of T-cell receptor D β 1 promoter by KLF5 through reiterated GC-rich motifs. *Blood* 101: 4492-4499.
5. Chiambaretta, F., et al. 2004. Cell and tissue specific expression of human Krüppel-like transcription factors in human ocular surface. *Mol. Vis.* 10: 901-909.
6. Ghaleb, A.M., et al. 2005. Krüppel-like factors 4 and 5: the yin and yang regulators of cellular proliferation. *Cell Res.* 15: 92-96.

CHROMOSOMAL LOCATION

Genetic locus: KLF3 (human) mapping to 4p14.

SOURCE

KLF3 (H-8) is a mouse monoclonal antibody raised against amino acids 1-98 mapping at the N-terminus of KLF3 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

PROTOCOLS

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

APPLICATIONS

KLF3 (H-8) is recommended for detection of KLF3 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 KLF3 siRNA (h): sc-44963, KLF3 shRNA Plasmid (h): sc-44963-SH and KLF3 shRNA (h) Lentiviral Particles: sc-44963-V.

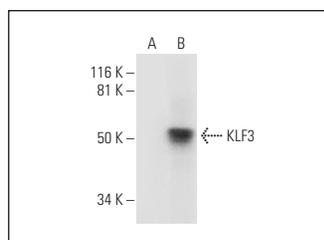
Molecular Weight of KLF3: 39 kDa.

Positive Controls: KLF3 (h): 293T Lysate: sc-370637 or Hep G2 cell lysate: sc-2227.

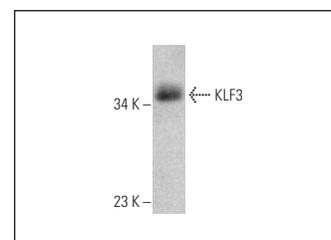
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



KLF3 (H-8): sc-393041. Western blot analysis of KLF3 expression in non-transfected: sc-117752 (A) and human KLF3 transfected: sc-370637 (B) 293T whole cell lysates.



KLF3 (H-8): sc-393041. Western blot analysis of KLF3 expression in Hep G2 whole cell lysate.

RESEARCH USE

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