

KLF3 (I-16): sc-30380

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

- 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.
- Kaczynski, J., et al. 2003. Sp1- and Krüppel-like transcription factors. *Genome Biol.* 4: 206.
- Turner, J., et al. 2003. The LIM protein FHL-3 binds basic Krüppel-like factor/Krüppel-like factor 3 and its co-repressor C-terminal-binding protein 2. *J. Biol. Chem.* 278: 12786-12795.
- 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.
- 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.
- 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; Klf3 (mouse) mapping to 5 C3.1.

SOURCE

KLF3 (I-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of KLF3 of human origin.

PRODUCT

Each vial contains 200 μ g 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-30380 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-30380 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

KLF3 (I-16) is recommended for detection of KLF3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

KLF3 (I-16) is also recommended for detection of KLF3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for KLF3 siRNA (h): sc-44963, KLF3 siRNA (m): sc-44964, KLF3 shRNA Plasmid (h): sc-44963-SH, KLF3 shRNA Plasmid (m): sc-44964-SH, KLF3 shRNA (h) Lentiviral Particles: sc-44963-V and KLF3 shRNA (m) Lentiviral Particles: sc-44964-V.

KLF3 (I-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of KLF3: 39 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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


 MONOS
 Satisfaction
 Guaranteed

Try **KLF3 (B-12): sc-514500** or **KLF3 (H-8): sc-393041**, our highly recommended monoclonal alternatives to KLF3 (I-16).