

# KLF3 (K-22): sc-133712

## BACKGROUND

Kruppel-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 co-regulators with which they interact. KLF6, also designated Zf9 or CPBP (core promoter-binding protein), and KLF3 are Kruppel-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 Kruppel-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 Kruppel-like transcription factors. *Genome Biol.* 4: 206.
3. Turner, J., et al. 2003. The LIM protein FHL-3 binds basic Kruppel-like factor/Kruppel-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  $\beta$  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 Kruppel-like transcription factors in human ocular surface. *Mol. Vis.* 10: 901-909.
6. Ghaleb, A.M., et al. 2005. Kruppel-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 (K-22) is a Protein A purified rabbit polyclonal antibody raised against synthetic KLF3 peptide of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

KLF3 (K-22) is recommended for detection of KLF3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] 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.

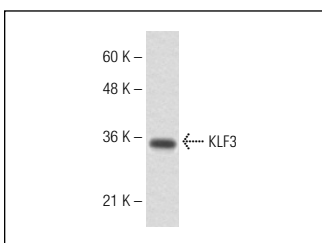
Molecular Weight of KLF3: 39 kDa.

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

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



KLF3 (K-22): sc-133712. Western blot analysis of KLF3 expression in Hep G2 whole cell lysate.

## RESEARCH USE

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

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Try **KLF3 (B-12): sc-514500** or **KLF3 (H-8): sc-393041**, our highly recommended monoclonal alternatives to KLF3 (K-22).