SANTA CRUZ BIOTECHNOLOGY, INC.

KLF3 (N-20): sc-33337



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 coregulators 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

- 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.
- 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.
- 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.
- 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.

CHROMOSOMAL LOCATION

Genetic locus: KLF3 (human) mapping to 4p14; Klf3 (mouse) mapping to 5 C3.1.

SOURCE

KLF3 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of KLF3 of human origin.

PRODUCT

Each vial contains 200 μ g lgG 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-33337 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-33337 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 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.

APPLICATIONS

KLF3 (N-20) 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), 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).

KLF3 (N-20) 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 (N-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of KLF3: 39 kDa.

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

DATA



KLF3 (N-20): sc-33337. Western blot analysis of KLF3 expression in non-transfected: sc-117752 (**A**) and human KLF3 transfected: sc-370637 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Madonna, S., et al. 2010. The IFN- γ -dependent suppressor of cytokine signaling 1 promoter activity is positively regulated by IFN regulatory factor-1 and Sp1 but repressed by growth factor independence-1 β and Krüppel-like factor-4, and it is dysregulated in psoriatic keratinocytes. J. Immunol. 185: 2467-2481.

MONOS Satisfation Guaranteed KLF3 (N-20).