SANTA CRUZ BIOTECHNOLOGY, INC.

KLF15 (C-14): sc-34826



BACKGROUND

KLF15, KLF6 and KLF3 are Krüppel-like zinc finger-containing transcription factors. KLF15, a kidney-enriched Krüppel-like factor, is a transcriptonal activator that binds the CLCNKA promoter. KLF6 (also designated Zf9 or CPBP, for core promoter-binding protein) is rapidly induced during hepatic stellate cell activation and transactivates a reporter gene driven by the Collagen I promoter, suggesting that KLF6 plays a role in the response to tissue injury. KLF3 may play a role in hematopoiesis. KLF15, which is a nuclear protein, is expressed primarily in liver, heart, skeletal muscle and kidney tissues but is not detected in lymphoid tissues or bone marrow. It is an important regulator of GLUT4 in both adipose and muscle tissues.

REFERENCES

- Gray, S., et al. 2002. The Krüppel-like factor KLF15 regulates the Insulinsensitive glucose transporter GLUT4. J. Biol. Chem. 277: 34322-34328.
- Otteson, D.C., et al. 2004. Krüppel-like factor 15, a zinc-finger transcriptional regulator, represses the rhodopsin and interphotoreceptor retinoidbinding protein promoters. Invest. Ophthalmol. Vis. Sci. 45: 2522-2530.
- Otteson, D.C., et al. 2005. Zinc-finger domains of the transcriptional repressor KLF15 bind multiple sites in rhodopsin and IRBP promoters including the CRS-1 and G-rich repressor elements. BMC Mol. Biol. 6: 15.
- 4. Mori, T., et al. 2005. Role of Krüppel-like factor 15 (KLF15) in transcriptional regulation of adipogenesis. J. Biol. Chem. 280: 12867-12875.

CHROMOSOMAL LOCATION

Genetic locus: KLF15 (human) mapping to 3q21.3; Klf15 (mouse) mapping to 6 D1.

SOURCE

KLF15 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of KLF15 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-34826 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-34826 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.

PROTOCOLS

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

APPLICATIONS

KLF15 (C-14) is recommended for detection of KLF15 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

KLF15 (C-14) is also recommended for detection of KLF15 in additional species, including canine and avian.

Suitable for use as control antibody for KLF15 siRNA (h): sc-45567, KLF15 siRNA (m): sc-45568, KLF15 shRNA Plasmid (h): sc-45567-SH, KLF15 shRNA Plasmid (m): sc-45568-SH, KLF15 shRNA (h) Lentiviral Particles: sc-45567-V and KLF15 shRNA (m) Lentiviral Particles: sc-45568-V.

KLF15 (C-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of KLF15: 44 kDa.

Positive Controls: KNRK nuclear extract: sc-2141.

DATA





KLF15 (C-14): sc-34826. Western blot analysis of KLF15 expression in KNRK nuclear extract.

KLF15 (C-14): sc-34826. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in tubules.

RESEARCH USE

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

MONOS Satisfation Guaranteed

Try KLF15 (A-5): sc-271675 or KLF15 (A-12): sc-393627, our highly recommended monoclonal alternatives to KLF15 (C-14).