SANTA CRUZ BIOTECHNOLOGY, INC.

KLF17 (B-6): sc-398132

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 which coregulators they interact with. KLF17 (Krüppel-like factor 17), whose alternative names include ZNF393 (zinc finger protein 393) or zfp393, is a 389 amino acid nuclear protein belonging to the Sp1 C_2H_2-type zinc-finger protein family. Expressed in testis and ovary, KLF17 may function as a germ cell-specific transcription factor involved in oocyte development and spermatid differentiation. Containing three C_2H_2-type zinc fingers which bind G/C-rich sites, KLF17 activates transcription from CACCC-box elements.

REFERENCES

1. Black, A.R., et al. 2001. Sp1 and Krüppel-like factor family of transcription factors in cell growth regulation and cancer. J. Cell. Physiol. 188: 143-160.
2. Yan, W., et al. 2002. Identification of zfp393, a germ cell-specific gene encoding a novel zinc finger protein. Mech. Dev. 118: 233-239.
3. Kaczynski, J., et al. 2003. Sp1- and Krüppel-like transcription factors. Genome Biol. 4: 206.
4. Kimura, K., et al. 2006. Diversification of transcriptional modulation: large-scale identification and characterization of putative alternative promoters of human genes. Genome Res. 16: 55-65.
5. van Vliet, J., et al. 2006. Human KLF17 is a new member of the Sp/KLF family of transcription factors. Genomics 87: 474-482.

CHROMOSOMAL LOCATION

Genetic locus: KLF17 (human) mapping to 1p34.1.

SOURCE

KLF17 (B-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 178-199 within an internal region of KLF17 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

KLF17 (B-6) is available conjugated to agarose (sc-398132 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398132 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398132 PE), fluorescein (sc-398132 FITC), Alexa Fluor® 488 (sc-398132 AF488), Alexa Fluor® 546 (sc-398132 AF546), Alexa Fluor® 594 (sc-398132 AF594) or Alexa Fluor® 647 (sc-398132 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398132 AF680) or Alexa Fluor® 790 (sc-398132 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398132 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

KLF17 (B-6) is recommended for detection of KLF17 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 KLF17 siRNA (h): sc-88294, KLF17 shRNA Plasmid (h): sc-88294-SH and KLF17 shRNA (h) Lentiviral Particles: sc-88294-V.

Molecular Weight (predicted) of KLF17: 43 kDa.

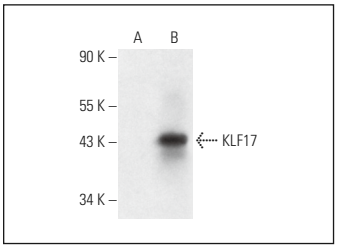
Molecular Weight (observed) of KLF17: 57 kDa.

Positive Controls: KLF17 (h): 293T Lysate: sc-116004.

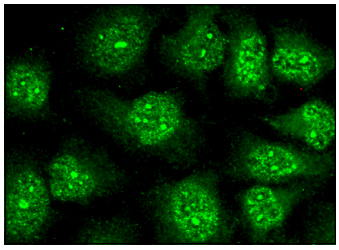
RECOMMENDED SUPPORT REAGENTS

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



KLF17 (B-6): sc-398132. Western blot analysis of KLF17 expression in non-transfected: sc-117752 (**A**) and human KLF17 transfected: sc-116004 (**B**) 293T whole cell lysates.



KLF17 (B-6): sc-398132. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

SELECT PRODUCT CITATIONS

1. Gao, B., et al. 2021. Identification of triptonide as a therapeutic agent for triple negative breast cancer treatment. Sci. Rep. 11: 2408.

STORAGE

Store at 4° C, **DO 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.