# KLF17 (F-14): sc-103582



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 co-regulators 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**

- Black, A.R., Black, J.D. and Azizkhan-Clifford, J. 2001. Sp1 and krüppel-like factor family of transcription factors in cell growth regulation and cancer. J. Cell. Physiol. 188: 143-160.
- Yan, W., Burns, K.H., Ma, L. and Matzuk, M.M. 2002. Identification of Zfp393, a germ cell-specific gene encoding a novel zinc finger protein. Mech. Dev. 118: 233-239.
- 3. Kaczynski, J., Cook, T. and Urrutia, R. 2003. Sp1- and Krüppel-like transcription factors. Genome Biol. 4: 206.
- Kimura, K., Wakamatsu, A., Suzuki, Y., Ota, T., Nishikawa, T., Yamashita, R., Yamamoto, J., Sekine, M., Tsuritani, K., Wakaguri, H., Ishii, S., Sugiyama, T., Saito, K., Isono, Y., Irie, R., Kushida, N., Yoneyama, T., et al. 2006. Diversification of transcriptional modulation: large-scale identification and characterization of putative alternative promoters of human genes. Genome Res. 16: 55-65.
- van Vliet, J., Crofts, L.A., Quinlan, K.G., Czolij, R., Perkins, A.C. and Crossley, M. 2006. Human KLF17 is a new member of the Sp/KLF family of transcription factors. Genomics 87: 474-482.
- 6. Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 609602. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Gumireddy, K., Li, A., Gimotty, P.A., Klein-Szanto, A.J., Showe, L.C., Katsaros, D., Coukos, G., Zhang, L. and Huang, Q. 2009. KLF17 is a negative regulator of epithelial-mesenchymal transition and metastasis in breast cancer. Nat. Cell Biol. 11: 1297-1304.

# **CHROMOSOMAL LOCATION**

Genetic locus: Klf17 (mouse) mapping to 4 D2.1.

# **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.

#### **SOURCE**

KLF17 (F-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of KLF17 of mouse origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-103582 P, ( $100 \mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

KLF17 (F-14) is recommended for detection of KLF17 of mouse and rat 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).

Suitable for use as control antibody for KLF17 siRNA (m): sc-105600, KLF17 shRNA Plasmid (m): sc-105600-SH and KLF17 shRNA (m) Lentiviral Particles: sc-105600-V.

Molecular Weight of KLF17: 43 kDa.

# **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.

#### **PROTOCOLS**

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

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com