

## ZNF133 (E-16): sc-86036

### BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. The majority of zinc-finger proteins contain a Krüppel-type DNA binding domain and a KRAB domain, which is thought to interact with KAP1, thereby recruiting histone modifying proteins. ZNF133 (zinc finger protein 133), also known as ZNF150 (zinc finger protein 150), is a 654 amino acid transcriptional regulator that is expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. The KRAB domain derived from ZNF133 is suggested to be a potent transcriptional repression domain and its repression activity may be enhanced by PIAS 1 (protein inhibitor of activated STAT protein 1).

### REFERENCES

1. Vissing, H., et al. 1995. Repression of transcriptional activity by heterologous KRAB domains present in zinc finger proteins. *FEBS Lett.* 369: 153-157.
2. Tommerup, N., et al. 1995. Isolation and fine mapping of 16 novel human zinc finger-encoding cDNAs identify putative candidate genes for developmental and malignant disorders. *Genomics* 27: 259-264.
3. Online Mendelian Inheritance in Man, OMIM™. 1999. Johns Hopkins University, Baltimore, MD. MIM Number: 604075. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Heiskanen, M.A., et al. 2000. Detection of gene amplification by genomic hybridization to cDNA microarrays. *Cancer Res.* 60: 799-802.
5. Ehringer, M.A., et al. 2002. Human alcoholism studies of genes identified through mouse quantitative trait locus analysis. *Addict Biol.* 7: 365-371.
6. Ehringer, M.A., et al. 2002. Fine mapping of polymorphic alcohol-related quantitative trait loci candidate genes using interval-specific congenic recombinant mice. *Alcohol. Clin. Exp. Res.* 26: 1603-1608.
7. Andersen, K., et al. 2003. Interferon- $\gamma$  suppresses S100A4 transcription independently of apoptosis or cell cycle arrest. *Br. J. Cancer* 88: 1995-2001.
8. Lee, S.J., et al. 2007. PIAS1 interacts with the KRAB zinc finger protein, ZNF133, via zinc finger motifs and regulates its transcriptional activity. *Exp. Mol. Med.* 39: 450-457.
9. SWISS-PROT/TrEMBL (P52736). World Wide Web URL: <http://www.expasy.ch/sprot/sprot-top.html>

### CHROMOSOMAL LOCATION

Genetic locus: ZNF133 (human) mapping to 20p11.23.

### SOURCE

ZNF133 (E-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ZNF133 of human origin.

### STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### PRODUCT

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

Blocking peptide available for competition studies, sc-86036 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-86036 X, 100  $\mu$ g/0.1 ml.

### APPLICATIONS

ZNF133 (E-16) is recommended for detection of ZNF133 of human 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); non cross-reactive with other ZNF family members.

Suitable for use as control antibody for ZNF133 siRNA (h): sc-76968, ZNF133 shRNA Plasmid (h): sc-76968-SH and ZNF133 shRNA (h) Lentiviral Particles: sc-76968-V.

ZNF133 (E-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ZNF133: 73 kDa.

### 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) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### RESEARCH USE

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

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.