

ZNF593 (P-17): sc-249691



The Power to Question

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. ZNF593 (zinc finger protein 593), also known as ZT86, is a 134 amino acid protein that contains one C₂H₂-type zinc finger and belongs to the ZNF593/BUD20 C₂H₂-type zinc-finger protein family. Localizing to the nucleus, ZNF593 is ubiquitously expressed, with high levels of expression found in spleen, prostate, testis, small intestine and colon. ZNF593 negatively regulates Oct-2 DNA binding activity and transcriptional regulatory activity. The gene encoding ZNF593 maps to human chromosome 1p36.11 and mouse chromosome 4 D3.

REFERENCES

1. Bray, P., et al. 1991. Characterization and mapping of human genes encoding zinc finger proteins. *Proc. Natl. Acad. Sci. USA* 88: 9563-9567.
2. Lichter, P., et al. 1992. Clustering of C₂-H₂ zinc finger motif sequences within telomeric and fragile site regions of human chromosomes. *Genomics* 13: 999-1007.
3. Terunuma, A., et al. 1997. A novel genetic system to isolate a dominant negative effector on DNA-binding activity of Oct-2. *Nucleic Acids Res.* 25: 1984-1990.
4. Shannon, M., et al. 2003. Differential expansion of zinc-finger transcription factor loci in homologous human and mouse gene clusters. *Genome Res.* 13: 1097-1110.
5. Huntley, S., et al. 2006. A comprehensive catalog of human KRAB-associated zinc finger genes: insights into the evolutionary history of a large family of transcriptional repressors. *Genome Res.* 16: 669-677.
6. Hayes, P.L., et al. 2008. The solution structure of ZNF593 from *Homo sapiens* reveals a zinc finger in a predominantly unstructured protein. *Protein Sci.* 17: 571-576.

CHROMOSOMAL LOCATION

Genetic locus: ZNF593 (human) mapping to 1p36.11; Zfp593 (mouse) mapping to 4 D3.

SOURCE

ZNF593 (P-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ZNF593 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-249691 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

ZNF593 (P-17) is recommended for detection of ZNF593 of mouse, rat and 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.

ZNF593 (P-17) is also recommended for detection of ZNF593 in additional species, including equine.

Suitable for use as control antibody for ZNF593 siRNA (h): sc-78792, ZNF593 siRNA (m): sc-155758, ZNF593 shRNA Plasmid (h): sc-78792-SH, ZNF593 shRNA Plasmid (m): sc-155758-SH, ZNF593 shRNA (h) Lentiviral Particles: sc-78792-V and ZNF593 shRNA (m) Lentiviral Particles: sc-155758-V.

Molecular Weight of ZNF593: 15 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.

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.