

ZNF519 (P-17): sc-85245



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. As a member of the krueppel C₂H₂-type zinc-finger protein family, ZNF519 (zinc finger protein 519) is a 540 amino acid nuclear protein that contains one KRAB domain and ten C₂H₂-type zinc fingers. The gene encoding ZNF519 maps to human chromosome 18, which houses over 300 protein-coding genes and contains nearly 76 million bases, representing about 2.5% of total DNA in cells. There are a variety of diseases associated with defects in chromosome 18-localized genes, some of which include Niemann-Pick disease, hereditary hemorrhagic telangiectasia, erythropoietic protoporphyria and follicular lymphomas.

REFERENCES

1. Payre, F. and Vincent, A. 1988. Finger proteins and DNA-specific recognition: distinct patterns of conserved amino acids suggest different evolutionary modes. *FEBS Lett.* 234: 245-250.
2. Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. *New Biol.* 2: 363-374.
3. Rosenfeld, R. and Margalit, H. 1993. Zinc fingers: conserved properties that can distinguish between spurious and actual DNA-binding motifs. *J. Biomol. Struct. Dyn.* 11: 557-570.
4. Laity, J.H., et al. 2001. Zinc finger proteins: new insights into structural and functional diversity. *Curr. Opin. Struct. Biol.* 11: 39-46.
5. Edelstein, L.C. and Collins, T. 2005. The SCAN domain family of zinc finger transcription factors. *Gene* 359: 1-17.
6. Grosso, S., et al. 2005. Chromosome 18 aberrations and epilepsy: a review. *Am. J. Med. Genet. A* 134A: 88-94.2
7. Gamsjaeger, R., et al. 2007. Sticky fingers: zinc-fingers as protein-recognition motifs. *Trends Biochem. Sci.* 32: 63-70.
8. Liu, J. and Stormo, G.D. 2008. Context-dependent DNA recognition code for C₂H₂ zinc-finger transcription factors. *Bioinformatics* 24: 1850-1857.

CHROMOSOMAL LOCATION

Genetic locus: ZNF519 (human) mapping to 18p11.21.

SOURCE

ZNF519 (P-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ZNF519 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.

RESEARCH USE

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

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-85245 P, (100 µg 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-85245 X, 100 µg/0.1 ml.

APPLICATIONS

ZNF519 (P-17) is recommended for detection of ZNF519 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 ZNF519 siRNA (h): sc-76993, ZNF519 shRNA Plasmid (h): sc-76993-SH and ZNF519 shRNA (h) Lentiviral Particles: sc-76993-V.

ZNF519 (P-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ZNF519: 63 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.

PROTOCOLS

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