

ZNF518 (C-15): sc-244795

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. ZNF518 (zinc finger protein 518) is a 1,483 amino acid nuclear protein belonging to the Krüppel C₂H₂-type zinc-finger protein family. Containing five C₂H₂-type zinc fingers, ZNF518 is thought to be involved in transcriptional regulation events. ZNF518 exists as two alternatively spliced isoforms and is encoded by a gene located on human chromosome 10, which consists of about 1,200 genes and makes up approximately 4.5% of the human genome.

REFERENCES

1. de Leeuw, R.J., et al. 2004. Comprehensive whole genome array CGH profiling of mantle cell lymphoma model genomes. *Hum. Mol. Genet.* 13: 1827-1837.
2. Edelstein, L.C. and Collins, T. 2005. The SCAN domain family of zinc finger transcription factors. *Gene* 359: 1-17.
3. Nusbaum, C., et al. 2006. DNA sequence and analysis of human chromosome 8. *Nature* 439: 331-335.
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. Zhong, Z., et al. 2007. Identification of a novel human zinc finger gene, ZNF438, with transcription inhibition activity. *J. Biochem. Mol. Biol.* 40: 517-524.
6. O'Geen, H., et al. 2007. Genome-wide analysis of KAP1 binding suggests autoregulation of KRAB-ZNFs. *PLoS Genet.* 3: e89.

CHROMOSOMAL LOCATION

Genetic locus: ZNF518A (human) mapping to 10q24.1; Zfp518a (mouse) mapping to 19 C3.

SOURCE

ZNF518 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of ZNF518 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-244795 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

ZNF518 (C-15) is recommended for detection of ZNF518 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 ZNF518B.

ZNF518 (C-15) is also recommended for detection of ZNF518 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ZNF518 siRNA (h): sc-90795, ZNF518 siRNA (m): sc-155737, ZNF518 shRNA Plasmid (h): sc-90795-SH, ZNF518 shRNA Plasmid (m): sc-155737-SH, ZNF518 shRNA (h) Lentiviral Particles: sc-90795-V and ZNF518 shRNA (m) Lentiviral Particles: sc-155737-V.

Molecular Weight of ZNF518 isoforms: 167/106 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.

RESEARCH USE

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

PROTOCOLS

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