SANTA CRUZ BIOTECHNOLOGY, INC.

ZFP1 (P-15): sc-107322

SANTA CRUZ BIOTECHNOLOGY

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. ZFP1 (zinc-finger protein 1), also known as ZNF475, is a 407 amino acid protein that contains one KRAB domain and 8 C_2H_2-type zinc fingers. Localizes to the nucleus, ZFP1 exists as multiple alternatively spliced isoforms and is thought to play a role in transcriptional regulation events. The gene encoding ZFP1 maps to human chromosome 16, which encodes over 900 genes and comprises nearly 3% of the human genome.

REFERENCES

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2. Chowdhury, K., Dietrich, S., Balling, R., Guenet, J.L. and Gruss, P. 1989. Structure, expression and chromosomal localization of Zfp-1, a murine zinc finger protein gene. Nucleic Acids Res. 17: 10427-10438.
3. South, T.L., Kim, B., Hare, D.R. and Summers, M.F. 1990. Zinc fingers and molecular recognition. Structure and nucleic acid binding studies of an HIV zinc finger-like domain. Biochem. Pharmacol. 40: 123-129.
4. Gilbert, F. 1999. Disease genes and chromosomes: disease maps of the human genome. Chromosome 16. Genet. Test. 3: 243-254.
5. Sun, Y., Gou, D.M., Liu, H., Peng, X. and Li, W.X. 2003. The KRAB domain of zinc finger gene ZNF268: a potential transcriptional repressor. IUBMB Life 55: 127-131.
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CHROMOSOMAL LOCATION

Genetic locus: Zfp1 (mouse) mapping to 8 E1.

SOURCE

ZFP1 (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZFP1 of mouse 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-107322 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

ZFP1 (P-15) is recommended for detection of ZFP1 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); non cross-reactive with other ZFP family members.

Suitable for use as control antibody for ZFP1 siRNA (m): sc-155519, ZFP1 shRNA Plasmid (m): sc-155519-SH and ZFP1 shRNA (m) Lentiviral Particles: sc-155519-V.

Molecular Weight of ZFP1 isoforms: 48/41 kDa.

Positive Controls: NIH/3T3 nuclear extract: sc-2138.

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.