

ZFP1 (E-13): sc-107321

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 C₂H₂-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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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.
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6. O'Geen, H., Squazzo, S.L., Iyengar, S., Blahnik, K., Rinn, J.L., Chang, H.Y., Green, R. and Farnham, P.J. 2007. Genome-wide analysis of KAP1 binding suggests autoregulation of KRAB-ZNFs. *PLoS Genet.* 3: e89.

CHROMOSOMAL LOCATION

Genetic locus: ZFP1 (human) mapping to 16q23.1.

SOURCE

ZFP1 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ZFP1 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-107321 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 (E-13) is recommended for detection of ZFP1 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 ZFP family members.

ZFP1 (E-13) is also recommended for detection of ZFP1 in additional species, including canine and porcine.

Suitable for use as control antibody for ZFP1 siRNA (h): sc-93226, ZFP1 shRNA Plasmid (h): sc-93226-SH and ZFP1 shRNA (h) Lentiviral Particles: sc-93226-V.

Molecular Weight of ZFP1 isoforms: 48/41 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or Jurkat whole cell lysate: sc-2204.

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.