

ZFP1 (T-21): sc-134161

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

1. Chowdhury, K., et al. 1988. Specific and ubiquitous expression of different Zn finger protein genes in the mouse. *Nucleic Acids Res.* 16: 9995-10011.
2. Chowdhury, K., et al. 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., et al. 1990. Zinc fingers and molecular recognition. Structure and nucleic acid binding studies of an HIV zinc finger-like domain. *Biochem. Pharmacol.* 40: 123-129.

CHROMOSOMAL LOCATION

Genetic locus: ZFP1 (human) mapping to 16q23.1; Zfp1 (mouse) mapping to 8 E1.

SOURCE

ZFP1 (T-21) is an affinity purified rabbit polyclonal antibody raised against synthetic ZFP1 peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

ZFP1 (T-21) is recommended for detection of ZFP1 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ZFP1 siRNA (h): sc-93226, ZFP1 siRNA (m): sc-155519, ZFP1 shRNA Plasmid (h): sc-93226-SH, ZFP1 shRNA Plasmid (m): sc-155519-SH, ZFP1 shRNA (h) Lentiviral Particles: sc-93226-V and ZFP1 shRNA (m) Lentiviral Particles: sc-155519-V.

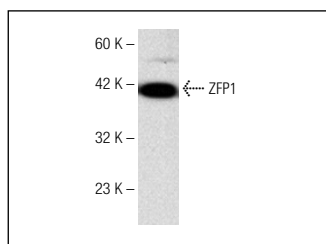
Molecular Weight of ZFP1 isoforms: 48/41 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

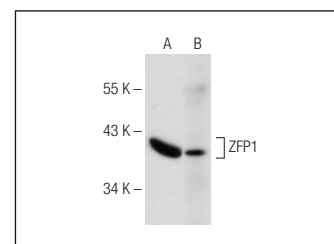
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

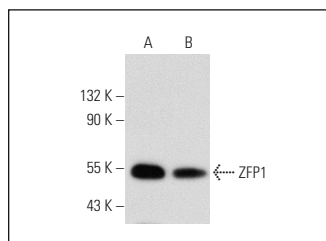
DATA



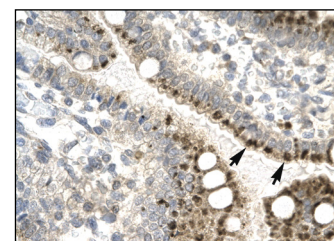
ZFP1 (T-21): sc-134161. Western blot analysis of ZFP1 expression in Jurkat whole cell lysate.



ZFP1 (T-21): sc-134161. Western blot analysis of ZFP1 expression in NIH/3T3 nuclear extract (A) and rat brain tissue extract (B).



ZFP1 (T-21): sc-134161. Western blot analysis of ZFP1 expression in HeLa (A) and NIH/3T3 (B) nuclear extracts.



ZFP1 (T-21): sc-134161. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human intestine tissue showing nuclear and cytoplasmic localization.

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.

PROTOCOLS

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