

ZFP57 (G-16): sc-169865

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. ZFP57 (zinc-finger protein 57), also known as ZNF698, is a 452 amino acid protein that contains one KRAB domain and seven C₂H₂-type zinc fingers and is a member of the Krüppel C₂H₂-type zinc-finger protein family. Localized to the nucleus, ZFP57 functions as a transcriptional repressor that inhibits the expression of Schwann cell-specific proteins, thereby playing a role in the development of the peripheral nervous system. ZFP57 exists as two isoforms that are produced from alternative splicing events.

REFERENCES

1. Okazaki, S., et al. 1994. A novel nuclear protein with zinc fingers down-regulated during early mammalian cell differentiation. *J. Biol. Chem.* 269: 6900-6907.
2. Abrink, M., et al. 1995. Isolation of cDNA clones for 42 different Krüppel-related zinc-finger proteins expressed in the human monoblast cell line U-937. *DNA Cell Biol.* 14: 125-136.
3. Williams, A.J., et al. 1999. The zinc finger-associated SCAN box is a conserved oligomerization domain. *Mol. Cell. Biol.* 19: 8526-8535.
4. Shannon, M., et al. 2003. Differential expansion of zinc-finger transcription factor loci in homologous human and mouse gene clusters. *Genome Res.* 13: 1097-1110.
5. Englbrecht, C.C., et al. 2004. Conservation, diversification and expansion of C₂H₂ zinc-finger proteins in the *Arabidopsis thaliana* genome. *BMC Genomics.* 5: 39-39.

CHROMOSOMAL LOCATION

Genetic locus: ZFP57 (human) mapping to 6p22.1.

SOURCE

ZFP57 (G-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZFP57 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-169865 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-169865 X, 200 µg/0.1 ml.

STORAGE

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

APPLICATIONS

ZFP57 (G-16) is recommended for detection of ZFP57 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.

Suitable for use as control antibody for ZFP57 siRNA (h): sc-95179, ZFP57 shRNA Plasmid (h): sc-95179-SH and ZFP57 shRNA (h) Lentiviral Particles: sc-95179-V.

ZFP57 (G-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ZFP57: 52 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 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.