

# ZFP57 (U-18): sc-102171

## 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 7 C<sub>2</sub>H<sub>2</sub>-type zinc fingers and is a member of the Krüppel C<sub>2</sub>H<sub>2</sub>-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

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- Williams, A.J., et al. 1999. The zinc finger-associated SCAN box is a conserved oligomerization domain. *Mol. Cell. Biol.* 19: 8526-8535.
- 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.
- Englbrecht, C.C., et al. 2004. Conservation, diversification and expansion of C<sub>2</sub>H<sub>2</sub> zinc finger proteins in the *Arabidopsis thaliana* genome. *BMC Genomics* 5: 39.
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- Mackay, D.J., et al. 2008. Hypomethylation of multiple imprinted loci in individuals with transient neonatal diabetes is associated with mutations in ZFP57. *Nat. Genet.* 40: 949-951.

## CHROMOSOMAL LOCATION

Genetic locus: ZFP57 (human) mapping to 6p22.1; Zfp57 (mouse) mapping to 17 B1.

## SOURCE

ZFP57 (U-18) is a purified rabbit polyclonal antibody raised against ZFP57 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

ZFP57 (U-18) is recommended for detection of ZFP57 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 ZFP57 siRNA (h): sc-95179, ZFP57 siRNA (m): sc-155566, ZFP57 shRNA Plasmid (h): sc-95179-SH, ZFP57 shRNA Plasmid (m): sc-155566-SH, ZFP57 shRNA (h) Lentiviral Particles: sc-95179-V and ZFP57 shRNA (m) Lentiviral Particles: sc-155566-V.

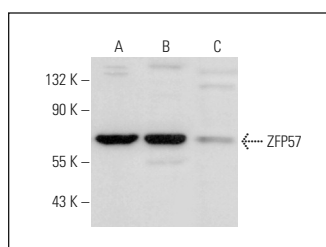
Molecular Weight of ZFP57: 52 kDa.

Positive Controls: BC<sub>3</sub>H1 cell lysate: sc-2299, EOC 20 whole cell lysate: sc-364187 or mouse brain extract: sc-2253.

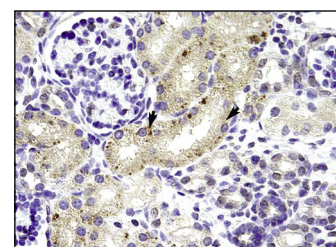
## RECOMMENDED SECONDARY REAGENTS

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



ZFP57 (U-18): sc-102171. Western blot analysis of ZFP57 expression in BC<sub>3</sub>H1 (A) and EOC 20 (B) whole cell lysates and mouse brain tissue extract (C).



ZFP57 (U-18): sc-102171. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing nuclear and cytoplasmic staining.

## 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.