

# ZNF57 (N-15): sc-324674



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. ZNF57 (zinc finger protein 57), also known as ZNF424 (zinc finger protein 424) or ZFP57, is a 555 amino acid member of the Krüppel C<sub>2</sub>H<sub>2</sub>-type zinc finger protein family and is thought to be involved in transcriptional regulation, specifically affecting the expression of peripheral nervous system-related genes. Localized to the nucleus, ZNF57 contains one KRAB domain and 13 C<sub>2</sub>H<sub>2</sub>-type zinc fingers through which it may convey its DNA, RNA and protein binding capabilities.

## REFERENCES

1. Bray, P., et al. 1991. Characterization and mapping of human genes encoding zinc finger proteins. *Proc. Natl. Acad. Sci. USA* 88: 9563-9567.
2. Lichter, P., et al. 1992. Clustering of C<sub>2</sub>-H<sub>2</sub> zinc finger motif sequences within telomeric and fragile site regions of human chromosomes. *Genomics* 13: 999-1007.
3. 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.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 612192. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. 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.
6. Alonso, M.B., et al. 2004. Identification and characterization of ZFP-57, a novel zinc finger transcription factor in the mammalian peripheral nervous system. *J. Biol. Chem.* 279: 25653-25664.

## CHROMOSOMAL LOCATION

Genetic locus: ZNF57 (human) mapping to 19p13.3.

## SOURCE

ZNF57 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ZNF57 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-324674 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

ZNF57 (N-15) is recommended for detection of ZNF57 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 zinc finger proteins.

Suitable for use as control antibody for ZNF57 siRNA (h): sc-97220, ZNF57 shRNA Plasmid (h): sc-97220-SH and ZNF57 shRNA (h) Lentiviral Particles: sc-97220-V.

Molecular Weight of ZNF57: 64 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.