

## ZNF449 (Z-22): sc-134192

### 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. As a member of the krueppel C<sub>2</sub>H<sub>2</sub>-type zinc-finger protein family, ZNF449 (zinc finger protein 449), also known as ZSCAN19 (zinc finger and SCAN domain-containing protein 19), is a 518 amino acid protein that contains one SCAN box domain and 7 C<sub>2</sub>H<sub>2</sub>-type zinc fingers. ZNF449 is ubiquitously expressed and localizes to the nucleus. There are three isoforms of ZNF449 that are produced as a result of alternative splicing events.

### REFERENCES

1. Freemont, P.S. 1993. The RING finger. A novel protein sequence motif related to the zinc finger. *Ann. N.Y. Acad. Sci.* 684: 174-192.
2. Klug, A. 1999. Zinc finger peptides for the regulation of gene expression. *J. Mol. Biol.* 293: 215-218.
3. Laity, J.H., et al. 2001. Zinc finger proteins: new insights into structural and functional diversity. *Curr. Opin. Struct. Biol.* 11: 39-46.
4. Matthews, J.M., et al. 2002. Zinc fingers-folds for many occasions. *IUBMB Life* 54: 351-355.
5. Brown, R.S. 2005. Zinc finger proteins: getting a grip on RNA. *Curr. Opin. Struct. Biol.* 15: 94-98.
6. Hall, T.M. 2005. Multiple modes of RNA recognition by zinc finger proteins. *Curr. Opin. Struct. Biol.* 15: 367-373.
7. Taylor, T.D., et al. 2006. Human chromosome 11 DNA sequence and analysis including novel gene identification. *Nature* 440: 497-500.
8. Gamsjaeger, R., et al. 2007. Sticky fingers: zinc-fingers as protein-recognition motifs. *Trends Biochem. Sci.* 32: 63-70.

### CHROMOSOMAL LOCATION

Genetic locus: ZNF449 (human) mapping to Xq26.3; Zfp449 (mouse) mapping to X A5.

### SOURCE

ZNF449 (Z-22) is an affinity purified rabbit polyclonal antibody raised against synthetic ZNF449 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.

### STORAGE

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

### APPLICATIONS

ZNF449 (Z-22) is recommended for detection of ZNF449 of mouse, rat 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ZNF449 siRNA (h): sc-91347, ZNF449 siRNA (m): sc-155722, ZNF449 shRNA Plasmid (h): sc-91347-SH, ZNF449 shRNA Plasmid (m): sc-155722-SH, ZNF449 shRNA (h) Lentiviral Particles: sc-91347-V and ZNF449 shRNA (m) Lentiviral Particles: sc-155722-V.

Molecular Weight (predicted) of ZNF449: 60 kDa.

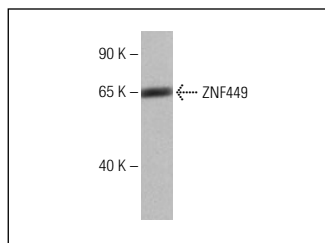
Molecular Weight (observed) of ZNF449: 65 kDa.

Positive Controls: ZNF449 (h): 293T Lysate: sc-178174.

### 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).

### DATA



ZNF449 (Z-22): sc-134192. Western blot analysis of human ZNF449 transfected 293T whole cell lysate.

### 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.