# ZNF558 (N-13): sc-132994



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. Zinc finger protein 558 (ZNF558) is a 402 amino acid member of the Krüppel  $C_2H_2$ -type zinc-finger protein family. Localized to the nucleus, ZNF558 contains nine  $C_2H_2$ -type zinc fingers and one KRAB domain through which it is thought to be involved in DNA-binding and transcriptional regulation.

## **REFERENCES**

- Payre, F. and Vincent, A. 1988. Finger proteins and DNA-specific recognition: distinct patterns of conserved amino acids suggest different evolutionary modes. FEBS Lett. 234: 245-250.
- Berg, J.M. 1988. Proposed structure for the zinc-binding domains from transcription factor IIIA and related proteins. Proc. Natl. Acad. Sci. USA 85: 99-102.
- 3. Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. New Biol. 2: 363-374.
- Rosenfeld, R. and Margalit, H. 1993. Zinc fingers: conserved properties that can distinguish between spurious and actual DNA-binding motifs. J. Biomol. Struct. Dvn. 11: 557-570.
- Abrink, M., Aveskogh, M. and Hellman, L. 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.
- 6. Walter, L. and Günther, E. 2000. Physical mapping and evolution of the centromeric class I gene-containing region of the rat MHC. Immunogenetics 51: 829-837.
- Durand, S., Abadie, P., Angeletti, S. and Genti-Raimondi, S. 2003. Identification of multiple differentially expressed messenger RNAs in normal and pathological trophoblast. Placenta 24: 209-218.
- Liu, J. and Stormo, G.D. 2008. Context-dependent DNA recognition code for C<sub>2</sub>H<sub>2</sub> zinc-finger transcription factors. Bioinformatics 24: 1850-1857.

# CHROMOSOMAL LOCATION

Genetic locus: ZNF558 (human) mapping to 19p13.2.

## SOURCE

ZNF558 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ZNF558 of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-132994 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

ZNF558 (N-13) is recommended for detection of ZNF558 of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); may cross-react with ZNF557.

Suitable for use as control antibody for ZNF558 siRNA (h): sc-97579, ZNF558 shRNA Plasmid (h): sc-97579-SH and ZNF558 shRNA (h) Lentiviral Particles: sc-97579-V.

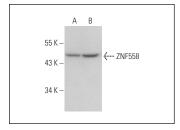
Molecular Weight of ZNF558: 46 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

## **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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

#### **DATA**



ZNF558 (N-13): sc-132994. Western blot analysis of ZNF558 expression in Jurkat (**A**) and K-562 (**B**) whole cell lysates.

#### **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.