ZNF568 (E-12): sc-132569



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 568 (ZNF568) is a 644 amino acid member of the Krüppel C_2H_2 -type zinc-finger protein family. Localized to the nucleus, ZNF568 contains 15 C_2H_2 -type zinc fingers and one KRAB domain through which it is thought to be involved in DNA-binding and transcriptional regulation. Two isoforms of ZNF568 exist as a result of alternative splicing events.

REFERENCES

- Payre, F., et al. 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.
- Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. New Biol. 2: 363-374.
- Rosenfeld, R., et al. 1993. Zinc fingers: conserved properties that can distinguish between spurious and actual DNA-binding motifs. J. Biomol. Struct. Dyn. 11: 557-570.
- Abrink, M., et al. 1995. Isolation of cDNA clones for 42 different Krüppelrelated zinc finger proteins expressed in the human monoblast cell line U-937. DNA Cell Biol. 14: 125-136.
- Walter, L., et al. 2000. Physical mapping and evolution of the centromeric class I gene-containing region of the rat MHC. Immunogenetics 51: 829-837.
- Durand, S., et al. 2003. Identification of multiple differentially expressed messenger RNAs in normal and pathological trophoblast. Placenta 24: 209-218.
- 8. Tian, C.Y., et al. 2006. Progress in the study of KRAB zinc finger protein. Yi Chuan 28: 1451-1456.
- 9. Liu, J., et al. 2008. Context-dependent DNA recognition code for $\rm C_2H_2$ zinc-finger transcription factors. Bioinformatics 24:1850-1857.

CHROMOSOMAL LOCATION

Genetic locus: ZNF568 (human) mapping to 19q13.12.

SOURCE

ZNF568 (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZNF568 of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-132569 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZNF568 (E-12) is recommended for detection of ZNF568 isoforms 1 and 2 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 ZNF family members.

Suitable for use as control antibody for ZNF568 siRNA (h): sc-97894, ZNF568 shRNA Plasmid (h): sc-97894-SH and ZNF568 shRNA (h) Lentiviral Particles: sc-97894-V.

Molecular Weight of ZNF568: 74 kDa.

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) 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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**