

# ZNF652 (C-13): sc-133019

## 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 652 (ZNF652) is a 606 amino acid member of the Krüppel C<sub>2</sub>H<sub>2</sub>-type zinc-finger protein family. Localized to the nucleus and highly expressed in breast, prostate and pancreas, ZNF652 contains nine C<sub>2</sub>H<sub>2</sub>-type zinc fingers, which are predicted to bind DNA. ZNF652 has been shown to interact with ETO-2, a putative breast tumor suppressor that represses transcription through its interaction with different DNA-binding zinc finger proteins. In this interaction, ZNF652 represses ETO-2 transcription, thereby playing a role in tumorigenesis.

## REFERENCES

1. 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.
2. Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. *New Biol.* 2: 363-374.
3. 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.
4. Abrink, M., et al. 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.
5. 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.
6. Durand, S., et al. 2003. Identification of multiple differentially expressed messenger RNAs in normal and pathological trophoblast. *Placenta* 24: 209-218.
7. Kumar, R., et al. 2006. ZNF652, a novel zinc finger protein, interacts with the putative breast tumor suppressor CBFA2T3 to repress transcription. *Mol. Cancer Res.* 4: 655-665.
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 C<sub>2</sub>H<sub>2</sub> zinc-finger transcription factors. *Bioinformatics* 24: 1850-1857.

## CHROMOSOMAL LOCATION

Genetic locus: ZNF652 (human) mapping to 17q21.32; Zfp652 (mouse) mapping to 11 D.

## SOURCE

ZNF652 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of ZNF652 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-133019 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ZNF652 (C-13) is recommended for detection of ZNF652 of mouse, rat and 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 ZNF652 siRNA (h): sc-94191, ZNF652 siRNA (m): sc-155773, ZNF652 shRNA Plasmid (h): sc-94191-SH, ZNF652 shRNA Plasmid (m): sc-155773-SH, ZNF652 shRNA (h) Lentiviral Particles: sc-94191-V and ZNF652 shRNA (m) Lentiviral Particles: sc-155773-V.

Molecular Weight of ZNF652: 85 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

## 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.

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