

ZNF322A/B (T-12): sc-132937

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. As a member of the Krüppel C₂H₂-type zinc-finger protein family, ZNF322A (zinc finger protein 322A), also designated ZNF388 or ZNF489, is a 402 amino acid protein containing 11 C₂H₂-type zinc fingers. ZNF322A is localized in both cytoplasm and nucleus and is ubiquitously expressed, with highest expression levels in heart and skeletal muscle. Overexpression of ZNF322A in COS-7 cells leads to transcriptional activation of SRE (serum response element) and c-Jun, suggesting that ZNF322A may function to activate the transcription of target transcription factors that are associated with MAP kinase signaling pathways.

REFERENCES

1. 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.
2. 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.
4. Rosenfeld, R. and Margalit, H. 1993. Zinc fingers: conserved properties that can distinguish between spurious and actual DNA-binding motifs. *J. Biomol. Struct. Dyn.* 11: 557-570.
5. 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.
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.
7. Li, Y., et al. 2004. ZNF322, a novel human C₂H₂ Krüppel-like zinc-finger protein, regulates transcriptional activation in MAPK signaling pathways. *Biochem. Biophys. Res. Commun.* 325: 1383-1392.
8. Tian, C.Y., et al. 2006. Progress in the study of KRAB zinc finger protein. *Yi Chuan* 28: 1451-1456.

CHROMOSOMAL LOCATION

Genetic locus: ZNF322 (human) mapping to 6p22.2, ZNF322P1 (human) mapping to 9q22.33; Zfp322a (mouse) mapping to 13 A3.1.

SOURCE

ZNF322A/B (T-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZNF322A 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 IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-132937 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZNF322A/B (T-12) is recommended for detection of ZNF322A and ZNF322B of human origin and ZNF322A of mouse and rat 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); non cross-reactive with other ZNF family members.

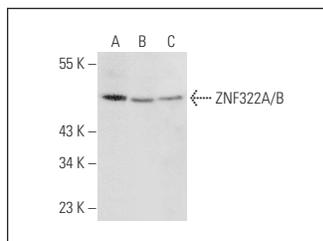
Molecular Weight of ZNF322A/B: 47 kDa.

Positive Controls: CTLL-2 cell lysate: sc-2242, NIH/3T3 whole cell lysate: sc-2210 or Sol8 cell lysate: sc-2249.

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



ZNF322A/B (T-12): sc-132937. Western blot analysis of ZNF322A/B expression in Sol8 (A), CTLL-2 (B) and NIH/3T3 (C) whole cell lysates.

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.