SANTA CRUZ BIOTECHNOLOGY, INC.

ZFAND2B (A-1): sc-398078

SANTA CRUZ BIOTECHNOLOGY

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. ZFAND2B (AN1-type zinc finger protein 2B) is a 257 amino acid protein containing two AN1-type zinc fingers and two UIM (ubiquitin-interacting motif) repeats. Conserved in animals and plants, the AN1-type zinc finger domain is often found in proteins that contain a ubiquitin-like domain, which suggests a role in the ubiquitination pathway. There are two isoforms of ZFAND2B that are produced as a result of alternative splicing events.

REFERENCES

1. Linnen, J.M., et al. 1993. Two related localized mRNAs from *Xenopus laevis* encode ubiquitin-like fusion proteins. Gene 128: 181-188.
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. and Sunde, M. 2002. Zinc fingers—folds for many occasions. IUBMB Life 54: 351-355.
5. Huang, J., et al. 2004. ZNF216 is an A20-like and IκB kinase γ-interacting inhibitor of NFκB activation. J. Biol. Chem. 279: 16847-16853.
6. Brown, R.S. 2005. Zinc finger proteins: getting a grip on RNA. Curr. Opin. Struct. Biol. 15: 94-98.
7. Hall, T.M. 2005. Multiple modes of RNA recognition by zinc finger proteins. Curr. Opin. Struct. Biol. 15: 367-373.
8. Gamsjaeger, R., et al. 2007. Sticky fingers: zinc-fingers as protein-recognition motifs. Trends Biochem. Sci. 32: 63-70.

CHROMOSOMAL LOCATION

Genetic locus: ZFAND2B (human) mapping to 2q35; Zfand2b (mouse) mapping to 1 C3.

SOURCE

ZFAND2B (A-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 129-152 within an internal region of ZFAND2B of human origin.

PRODUCT

Each vial contains 200 µg IgG_3 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-398078 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

ZFAND2B (A-1) is recommended for detection of ZFAND2B isoforms 1 and 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

ZFAND2B (A-1) is also recommended for detection of ZFAND2B isoforms 1 and 2 in additional species, including equine.

Suitable for use as control antibody for ZFAND2B siRNA (h): sc-94464, ZFAND2B siRNA (m): sc-155514, ZFAND2B shRNA Plasmid (h): sc-94464-SH, ZFAND2B shRNA Plasmid (m): sc-155514-SH, ZFAND2B shRNA (h) Lentiviral Particles: sc-94464-V and ZFAND2B shRNA (m) Lentiviral Particles: sc-155514-V.

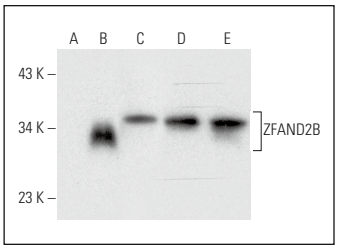
Molecular Weight of ZFAND2B: 28 kDa.

Positive Controls: ZFAND2B (h): 293T Lysate: sc-113058, LADMAC whole cell lysate: sc-364189 or WI-38 whole cell lysate: sc-364260.

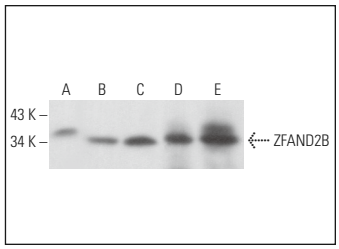
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



ZFAND2B (A-1): sc-398078. Western blot analysis of ZFAND2B expression in non-transfected 293T: sc-117752 (**A**), human ZFAND2B transfected 293T: sc-113058 (**B**), LADMAC (**C**), WI-38 (**D**) and Hep G2 (**E**) whole cell lysates.



ZFAND2B (A-1): sc-398078. Western blot analysis of ZFAND2B expression in Hep G2 (**A**), T98G (**B**) and C6 (**C**) whole cell lysates and human brain (**D**) and mouse brain (**E**) tissue extracts.

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.