SANTA CRUZ BIOTECHNOLOGY, INC.

ZFAND1 (K-20): sc-87507

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. ZFAND1 (AN1-type zinc finger protein 1) is a 268 amino acid protein that contains 2 AN1-type zinc fingers, which are often found in proteins that contain a ubiquitin-like domain and therefore play a role in the ubiquitination pathway. AN1-type zinc fingers contains six conserved cysteines and two histidines and have a dimetal (zinc)-bound α/β fold. There are two isoforms of ZFAND1 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., et al. 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.

CHROMOSOMAL LOCATION

Genetic locus: ZFAND1 (human) mapping to 8q21.13; Zfand1 (mouse) mapping to 3 A1.

SOURCE

ZFAND1 (K-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ZFAND1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-87507 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-87507 X, 100 µg/0.1 ml.

STORAGE

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

APPLICATIONS

ZFAND1 (K-20) is recommended for detection of ZFAND1 of mouse, rat and 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).

ZFAND1 (K-20) is also recommended for detection of ZFAND1 in additional species, including canine and porcine.

Suitable for use as control antibody for ZFAND1 siRNA (h): sc-77865, ZFAND1 siRNA (m): sc-155512, ZFAND1 shRNA Plasmid (h): sc-77865-SH, ZFAND1 shRNA Plasmid (m): sc-155512-SH, ZFAND1 shRNA (h) Lentiviral Particles: sc-77865-V and ZFAND1 shRNA (m) Lentiviral Particles: sc-155512-V.

ZFAND1 (K-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

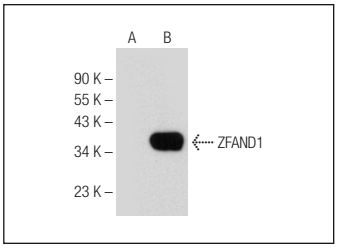
Molecular Weight of ZFAND1: 31 kDa.

Positive Controls: ZFAND1 (m): 293T Lysate: sc-124732.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



ZFAND1 (K-20): sc-87507. Western blot analysis of ZFAND1 expression in non-transfected: sc-117752 (**A**) and mouse ZFAND1 transfected: sc-124732 (**B**) 293T 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.