SANTA CRUZ BIOTECHNOLOGY, INC.

ZFAND2A (D-11): sc-377094

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. ZFAND2A (AN1-type zinc finger protein 2A) is a 171 amino acid protein containing two AN1-type zinc fingers. AN1-type zinc fingers contain six conserved cysteines, two histidines and have a dimetal (zinc)-bound α/β fold. The gene encoding ZFAND2A maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Defects in some of the genes localized to chromosome 7 have been linked to osteogenesis imperfecta, Williams-Beuren syndrome, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome.

REFERENCES

1. Tsipouras, P., et al. 1983. Restriction fragment length polymorphism associated with the pro α 2(I) gene of human type I procollagen. Application to a family with an autosomal dominant form of osteogenesis imperfecta. J. Clin. Invest. 72: 1262-1267.
2. Liang, H., et al. 1998. Molecular anatomy of chromosome 7q deletions in myeloid neoplasms: evidence for multiple critical loci. Proc. Natl. Acad. Sci. USA 95: 3781-3785.
3. Hillier, L.W., et al. 2003. The DNA sequence of human chromosome 7. Nature 424: 157-164.
4. Gerhard, D.S., et al. 2004. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Genome Res. 14: 2121-2127.
5. Carninci, P., et al. 2005. The transcriptional landscape of the mammalian genome. Science 309: 1559-1563.

CHROMOSOMAL LOCATION

Genetic locus: ZFAND2A (human) mapping to 7p22.3; Zfand2a (mouse) mapping to 5 G2.

SOURCE

ZFAND2A (D-11) is a mouse monoclonal antibody raised against amino acids 128-171 mapping at the C-terminus of ZFAND2A of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ZFAND2A (D-11) is available conjugated to agarose (sc-377094 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-377094 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377094 PE), fluorescein (sc-377094 FITC), Alexa Fluor® 488 (sc-377094 AF488), Alexa Fluor® 546 (sc-377094 AF546), Alexa Fluor® 594 (sc-377094 AF594) or Alexa Fluor® 647 (sc-377094 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-377094 AF680) or Alexa Fluor® 790 (sc-377094 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

ZFAND2A (D-11) is recommended for detection of ZFAND2A 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).

Suitable for use as control antibody for ZFAND2A siRNA (h): sc-89827, ZFAND2A siRNA (m): sc-155513, ZFAND2A shRNA Plasmid (h): sc-89827-SH, ZFAND2A shRNA Plasmid (m): sc-155513-SH, ZFAND2A shRNA (h) Lentiviral Particles: sc-89827-V and ZFAND2A shRNA (m) Lentiviral Particles: sc-155513-V.

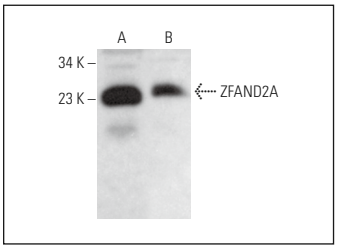
Molecular Weight of ZFAND2A: 19 kDa.

Positive Controls: PC-12 cell lysate: sc-2250, U-251-MG whole cell lysate: sc-364176 or c4 whole cell lysate: sc-364186.

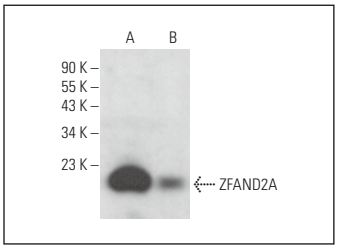
RECOMMENDED SUPPORT REAGENTS

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



ZFAND2A (D-11): sc-377094. Western blot analysis of ZFAND2A expression in c4 (**A**) and U-251-MG (**B**) whole cell lysates.



ZFAND2A (D-11): sc-377094. Western blot analysis of ZFAND2A expression in c4 (**A**) and PC-12 (**B**) whole cell lysates.

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.