SANTA CRUZ BIOTECHNOLOGY, INC.

ANKZF1 (B-12): sc-398713

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. ANKZF1 (ankyrin repeat and zinc finger domain containing 1), also known as ZNF744, is 726 amino acids in length and lacks a KRAB domain but contains one C_2H_2-type zinc finger and two ANK repeats. The gene encoding ANKZF1 localizes to chromosome 2.

REFERENCES

1. Maruyama, K. and Sugano, S. 1994. Oligo-capping: a simple method to replace the cap structure of eukaryotic mRNAs with oligoribonucleotides. Gene 138: 171-174.
2. Suzuki, Y., et al. 1997. Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. Gene 200: 149-156.
3. Strausberg, R.L., et al. 2002. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. Proc. Natl. Acad. Sci. USA 99: 16899-16903.
4. Stelzl, U., et al. 2005. A human protein-protein interaction network: a resource for annotating the proteome. Cell 122: 957-968.
5. Olsen, J.V., et al. 2006. Global, *in vivo,* and site-specific phosphorylation dynamics in signaling networks. Cell 127: 635-648.

CHROMOSOMAL LOCATION

Genetic locus: ANKZF1 (human) mapping to 2q35.

SOURCE

ANKZF1 (B-12) is a mouse monoclonal antibody raised against amino acids 68-355 mapping within an internal region of ANKZF1 of human origin.

PRODUCT

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

ANKZF1 (B-12) is available conjugated to agarose (sc-398713 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-398713 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398713 PE), fluorescein (sc-398713 FITC), Alexa Fluor® 488 (sc-398713 AF488), Alexa Fluor® 546 (sc-398713 AF546), Alexa Fluor® 594 (sc-398713 AF594) or Alexa Fluor® 647 (sc-398713 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398713 AF680) or Alexa Fluor® 790 (sc-398713 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

ANKZF1 (B-12) is recommended for detection of ANKZF1 of 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 ANKZF1 siRNA (h): sc-94287, ANKZF1 shRNA Plasmid (h): sc-94287-SH and ANKZF1 shRNA (h) Lentiviral Particles: sc-94287-V.

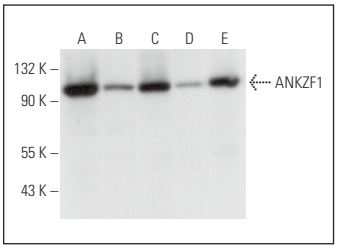
Molecular Weight of ANKZF1: 81 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Raji whole cell lysate: sc-364236 or RT-4 whole cell lysate: sc-364257.

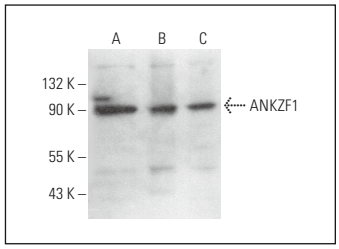
RECOMMENDED SUPPORT REAGENTS

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



ANKZF1 (B-12): sc-398713. Western blot analysis of ANKZF1 expression in HeLa (**A**), SW480 (**B**), Raji (**C**), PANC-1 (**D**) and RT-4 (**E**) whole cell lysates.



ANKZF1 (B-12): sc-398713. Western blot analysis of ANKZF1 expression in COLO 205 (**A**), Ramos (**B**) and MIA PaCa-2 (**C**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Yip, M.C.J., et al. 2019. Mechanism for recycling tRNAs on stalled ribosomes. Nat. Struct. Mol. Biol. 26: 343-349.
2. Wu, Z., et al. 2019. MISTERMINATE mechanistically links mitochondrial dysfunction with proteostasis failure. Mol. Cell 75: 835-848.e8.
3. Yip, M.C.J., et al. 2020. ELAC1 repairs tRNAs cleaved during ribosome-associated quality control. Cell Rep. 30: 2106-2114.e5.

RESEARCH USE

For research use only, not for use in diagnostic procedures.