SANTA CRUZ BIOTECHNOLOGY, INC.

ABT1 (B-9): sc-390233



BACKGROUND

The tumor necrosis factor family (TNF) receptor superfamily is composed of several type I integral membrane glycoproteins that exhibit homology in their cystine-rich extracellular domains. Members of this family include TNF-RI, TNF-RII and CD40. Ligands for these receptors can be small, secreted proteins such as TNF or type II integral membrane proteins as is the case for the CD40 ligand, CD40L. While the signal transduction mechanism of the TNF receptor superfamily is poorly understood, activation of TNF-R or CD40 has been shown to induce the nuclear translocation of NF κ B. Members of the TRAF (TNF receptor-associated factor) family have been implicated in this process. Four members have thus far been described and are designated TRAF1, TRAF2, TRAF3 (variously referred to as CRAF1, LAP1 or CD40bp) and TRAF4. TRAF4, originally termed CART1, is specifically expressed in breast carcinomas, and is localized to the nucleus in such tissues.

REFERENCES

- Sgouras, D.N., et al. 1995. ERF: an ETS domain protein with strong transcriptional repressor activity, can suppress ets-associated tumorigenesis and is regulated by phosphorylation during cell cycle and mitogenic stimulation. EMBO J. 14: 4781-4793.
- de Castro, C.M., et al. 1997. Genomic structure and chromosomal localization of the novel ETS factor, PE-2 (ERF). Genomics 42: 227-235.
- Liu, D., et al. 1997. ERF: genomic organization, chromosomal localization and promoter analysis of the human and mouse genes. Oncogene 14: 1445-1451.
- Oda, T., et al. 2000. A novel TATA-binding protein-binding protein, ABT1, activates basal transcription and has a yeast homolog that is essential for growth. Mol. Cell. Biol. 20: 1407-1418.

CHROMOSOMAL LOCATION

Genetic locus: ABT1 (human) mapping to 6p22.2; Abt1 (mouse) mapping to 13 A3.1.

SOURCE

ABT1 (B-9) is a mouse monoclonal antibody raised against amino acids 136-237 mapping within an internal region of ABT1 of human origin.

PRODUCT

Each vial contains 200 μg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ABT1 (B-9) is available conjugated to agarose (sc-390233 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390233 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390233 PE), fluorescein (sc-390233 FITC), Alexa Fluor[®] 488 (sc-390233 AF488), Alexa Fluor[®] 546 (sc-390233 AF546), Alexa Fluor[®] 594 (sc-390233 AF594) or Alexa Fluor[®] 647 (sc-390233 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-390233 AF680) or Alexa Fluor[®] 790 (sc-390233 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

ABT1 (B-9) is recommended for detection of ABT1 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 ABT1 siRNA (h): sc-105028, ABT1 siRNA (m): sc-140785, ABT1 shRNA Plasmid (h): sc-105028-SH, ABT1 shRNA Plasmid (m): sc-140785-SH, ABT1 shRNA (h) Lentiviral Particles: sc-105028-V and ABT1 shRNA (m) Lentiviral Particles: sc-140785-V.

Molecular Weight of ABT1: 31 kDa.

Positive Controls: ABT1 (h2): 293T Lysate: sc-370232.

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





ABT1 (B-9): sc-390233. Western blot analysis of ABT1 expression in non-transfected: sc-117752 (**A**) and human ABT1 transfected: sc-370232 (**B**) 293T whole cell lysates.

ABT1 (B-9): sc-390233. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

STORAGE

Store at 4° C, **D0 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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.