SANTA CRUZ BIOTECHNOLOGY, INC.

BAT2L (D-2): sc-393604

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

BAT2L (BAT2-like 1), also known as HLA-B-associated transcript 2-like 1 or KIAA0515, is a 1,535 amino acid protein expressed as four isoforms produced by alternative splicing events. The gene that encodes BAT2L maps to human chromosome 9, which consists of about 145 million bases and 4% of the human genome, encoding nearly 900 genes. Considered to play a role in gender determination, deletion of the distal portion of 9p can lead to development of male to female sex reversal, the phenotype of a female with a male X,Y genotype. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, is associated with the chromosome 9 gene encoding endoglin protein, ENG. Familial dysautonomia is also associated with chromosome 9 though through the gene IKBKAP. Notably, chromosome 9 encompasses the largest interferon family gene cluster. Chromosome 9 is partnered with chromosome 22 in the translocation leading to the aberrant production of Bcr-Abl fusion protein often found in leukemias.

REFERENCES

1. Humphray, S.J., et al. 2004. DNA sequence and analysis of human chromosome 9. Nature 429: 369-374.
2. Coppo, P., et al. 2006. Bcr-Abl activates STAT3 via JAK and MEK pathways in human cells. Br. J. Haematol. 134: 171-179.
3. Zheng, X., et al. 2006. Bcr and its mutants, the reciprocal t(9;22)-associated Abl/Bcr fusion proteins, differentially regulate the cytoskeleton and cell motility. BMC Cancer 6: 262.
4. Burmeister, T., et al. 2007. Atypical Bcr-Abl mRNA transcripts in adult acute lymphoblastic leukemia. Haematologica 92: 1699-1702.

CHROMOSOMAL LOCATION

Genetic locus: PRRC2B (human) mapping to 9q34.11; Prrc2b (mouse) mapping to 2 B.

SOURCE

BAT2L (D-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 2102-2139 within an internal region of BAT2L 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.

BAT2L (D-2) is available conjugated to agarose (sc-393604 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393604 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393604 PE), fluorescein (sc-393604 FITC), Alexa Fluor® 488 (sc-393604 AF488), Alexa Fluor® 546 (sc-393604 AF546), Alexa Fluor® 594 (sc-393604 AF594) or Alexa Fluor® 647 (sc-393604 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393604 AF680) or Alexa Fluor® 790 (sc-393604 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393604 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

BAT2L (D-2) is recommended for detection of BAT2L 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).

BAT2L (D-2) is also recommended for detection of BAT2L in additional species, including canine and porcine.

Suitable for use as control antibody for BAT2L siRNA (h): sc-106875, BAT2L siRNA (m): sc-140410, BAT2L shRNA Plasmid (h): sc-106875-SH, BAT2L shRNA Plasmid (m): sc-140410-SH, BAT2L shRNA (h) Lentiviral Particles: sc-106875-V and BAT2L shRNA (m) Lentiviral Particles: sc-140410-V.

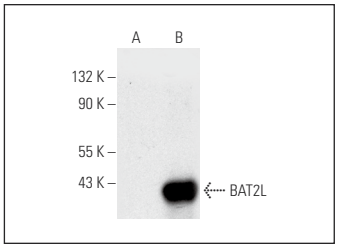
Molecular Weight of BAT2L: 166 kDa.

Positive Controls: BAT2L (h): 293T Lysate: sc-113073.

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



BAT2L (D-2): sc-393604. Western blot analysis of BAT2L expression in non-transfected: sc-117752 (**A**) and human BAT2L transfected: sc-113073 (**B**) 293T 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.