SANTA CRUZ BIOTECHNOLOGY, INC.

BAT4 (F-12): sc-514989

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

BAT4, also known as ANKRD59, G5 or GPATCH10, is a 356 amino acid protein that contains one G-patch domain and two ANK repeats and is thought to play a role in immunity-related events throughout the body. The BAT4 gene maps within a cluster of BAT genes on human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, Porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

REFERENCES

1. Spies, T., et al. 1989. Human major histocompatibility complex contains a minimum of 19 genes between the complement cluster and HLA-B. Proc. Natl. Acad. Sci. USA 86: 8955-8958.
2. Spies, T., et al. 1989. A new cluster of genes within the human major histocompatibility complex. Science 243: 214-217.
3. Banerji, J., et al. 1990. A gene pair from the human major histocompatibility complex encodes large proline-rich proteins with multiple repeated motifs and a single ubiquitin-like domain. Proc. Natl. Acad. Sci. USA 87: 2374-2378.
4. Online Mendelian Inheritance in Man, OMIM™. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 142610. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
5. Xie, T., et al. 2003. Analysis of the gene-dense major histocompatibility complex class III region and its comparison to mouse. Genome Res. 13: 2621-2636.

CHROMOSOMAL LOCATION

Genetic locus: GPANK1 (human) mapping to 6p21.33; Gpank1 (mouse) mapping to 17 B1.

SOURCE

BAT4 (F-12) is a mouse monoclonal antibody raised against amino acids 119-209 mapping within an internal region of BAT4 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.

BAT4 (F-12) is available conjugated to agarose (sc-514989 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514989 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514989 PE), fluorescein (sc-514989 FITC), Alexa Fluor® 488 (sc-514989 AF488), Alexa Fluor® 546 (sc-514989 AF546), Alexa Fluor® 594 (sc-514989 AF594) or Alexa Fluor® 647 (sc-514989 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514989 AF680) or Alexa Fluor® 790 (sc-514989 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

BAT4 (F-12) is recommended for detection of BAT4 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 BAT4 siRNA (h): sc-72616, BAT4 siRNA (m): sc-72617, BAT4 shRNA Plasmid (h): sc-72616-SH, BAT4 shRNA Plasmid (m): sc-72617-SH, BAT4 shRNA (h) Lentiviral Particles: sc-72616-V and BAT4 shRNA (m) Lentiviral Particles: sc-72617-V.

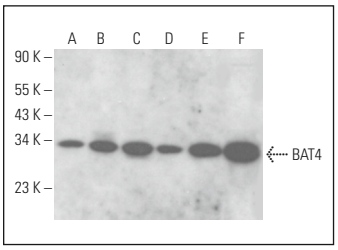
Molecular Weight of BAT4: 39 kDa.

Positive Controls: EOC 20 whole cell lysate: sc-364187, JAR cell lysate: sc-2276 or HeLa whole cell lysate: sc-2200.

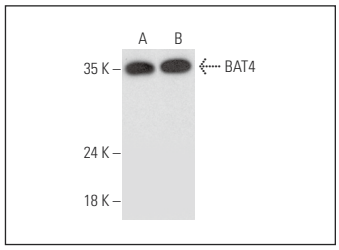
RECOMMENDED SUPPORT REAGENTS

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



BAT4 (F-12): sc-514989. Western blot analysis of BAT4 expression in EOC 20 (**A**), BW5147 (**B**), MH-S (**C**), RAW 264.7 (**D**), WEHI-231 (**E**) and F9 (**F**) whole cell lysates.



BAT4 (F-12): sc-514989. Western blot analysis of BAT4 expression in JAR (**A**) and HeLa (**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.

PROTOCOLS

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