

BAT4 (L-18): sc-79862

BACKGROUND

BAT4, also known as ANKRD59, G5 or GPATCH10, is a 356 amino acid protein that contains one G-patch domain and 2 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

- Spies, T., Bresnahan, M. and Strominger, J.L. 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.
- Spies, T., Blanck, G., Bresnahan, M., Sands, J. and Strominger, J.L. 1989. A new cluster of genes within the human major histocompatibility complex. *Science* 243: 214-217.
- Banerji, J., Sands, J., Strominger, J.L. and Spies, T. 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.
- 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/>
- Xie, T., Rowen, L., Aguado, B., Ahearn, M.E., Madan, A., Qin, S., Campbell, R.D. and Hood, L. 2003. Analysis of the gene-dense major histocompatibility complex class III region and its comparison to mouse. *Genome Res.* 13: 2621-2636.
- Martinez, A., Salido, M., Bonilla, G., Pascual-Salcedo, D., Fernandez-Arquero, M., de Miguel, S., Balsa, A., de la Concha, E.G. and Fernandez-Gutierrez, B. 2004. Association of the major histocompatibility complex with response to infliximab therapy in rheumatoid arthritis patients. *Arthritis Rheum.* 50: 1077-1082.
- Harney, S.M., Vilariño-Güell, C., Adamopoulos, I.E., Sims, A.M., Lawrence, R.W., Cardon, L.R., Newton, J.L., Meisel, C., Pointon, J.J., Darke, C., Athanasou, N., Wordsworth, B.P. and Brown, M.A. 2008. Fine mapping of the MHC Class III region demonstrates association of AIF1 and rheumatoid arthritis. *Rheumatology* 47: 1761-1767.

CHROMOSOMAL LOCATION

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

SOURCE

BAT4 (L-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BAT4 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-79862 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-79862 X, 200 µg/0.1 ml.

APPLICATIONS

BAT4 (L-18) is recommended for detection of BAT4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

BAT4 (L-18) is also recommended for detection of BAT4 in additional species, including equine, canine, bovine and porcine.

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.

BAT4 (L-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of BAT4: 39 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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 or our catalog for detailed protocols and support products.