

BAT2 (A-10): sc-373747

BACKGROUND

BAT2, also known as G₂, is a 2,157 amino acid protein that localizes to both the nucleus and the cytoplasm. Expressed in cell lines of leukemic origin, BAT2 exists as multiple alternatively spliced isoforms and is thought to play a role in the regulation of pre-mRNA splicing. The BAT2 gene maps within a cluster of BAT genes on human chromosome 6 and is implicated in the development of rheumatoid arthritis and Insulin-dependent diabetes mellitus (IDDM). Chromosome 6, on which the BAT2 gene is localized, 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. 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.
2. Hashimoto, M., et al. 1999. Genetic contribution of the BAT2 gene microsatellite polymorphism to the age-at-onset of Insulin-dependent diabetes mellitus. *Hum. Genet.* 105: 197-199.

CHROMOSOMAL LOCATION

Genetic locus: PRRC2A (human) mapping to 6p21.33; Prrc2a (mouse) mapping to 17 B1.

SOURCE

BAT2 (A-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 575-609 within an internal region of BAT2 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-373747 X, 200 µg/0.1 ml.

BAT2 (A-10) is available conjugated to agarose (sc-373747 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-373747 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-373747 PE), fluorescein (sc-373747 FITC), Alexa Fluor® 488 (sc-373747 AF488), Alexa Fluor® 546 (sc-373747 AF546), Alexa Fluor® 594 (sc-373747 AF594) or Alexa Fluor® 647 (sc-373747 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-373747 AF680) or Alexa Fluor® 790 (sc-373747 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-373747 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

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

APPLICATIONS

BAT2 (A-10) is recommended for detection of BAT2 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).

BAT2 (A-10) is also recommended for detection of BAT2 in additional species, including equine.

Suitable for use as control antibody for BAT2 siRNA (h): sc-72612, BAT2 siRNA (m): sc-72613, BAT2 shRNA Plasmid (h): sc-72612-SH, BAT2 shRNA Plasmid (m): sc-72613-SH, BAT2 shRNA (h) Lentiviral Particles: sc-72612-V and BAT2 shRNA (m) Lentiviral Particles: sc-72613-V.

BAT2 (A-10) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of BAT2: 228 kDa.

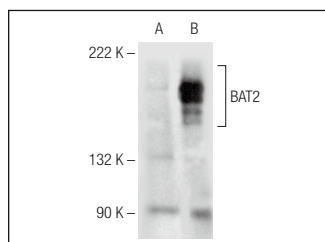
Positive Controls: BAT2 (h2): 293T Lysate: sc-116267 or K-562 whole cell lysate: sc-2203.

RECOMMENDED SUPPORT REAGENTS

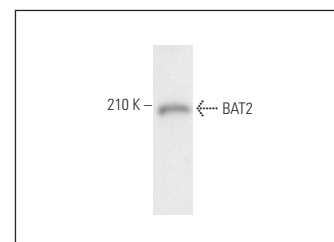
To ensure optimal results, the following support reagents are recommended:

- 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



BAT2 (A-10): sc-373747. Western blot analysis of BAT2 expression in non-transfected: sc-117752 (A) and human BAT2 transfected: sc-116267 (B) 293T whole cell lysates.



BAT2 (A-10): sc-373747. Western blot analysis of BAT2 expression in K-562 whole cell lysate.

STORAGE

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

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