

BACH1 (L-25): sc-100995

BACKGROUND

Members of the small Maf family (MafK, MafF, and MafG) are basic region leucine zipper (bZip) proteins that can function as transcriptional activators or repressors. They dimerize with other proteins and bind DNA to either repress or activate transcription depending on the dimer compositions. BACH1 and BACH2, heterodimerization partners of MafK, are members of a novel family of BTB/POZ-basic region leucine zipper (bzip) factors. BACH1 and BACH2 have significant similarity to each other in BTB domain and Cap "n" collar-type bZip domain but are otherwise divergent. BACH1 appears ubiquitous, whereas BACH2 is restricted to monocytes and neuronal cells and is abundantly expressed in the early stages of B cell differentiation.

REFERENCES

- Oyake, T., et al. 1996. BACH proteins belong to a novel family of BTB-basic leucine zipper transcription factors that interact with MafK and regulate transcription through the NF-E2 site. *Mol. Cell. Biol.* 16: 6083-6095.
- Hoshino, H., et al. 2000. Oxidative stress abolishes leptomycin B-sensitive nuclear export of transcription repressor BACH2 that counteracts activation of Maf recognition element. *J. Biol. Chem.* 275: 15370-15376.
- Kanezaki, R., et al. 2000. Transcription factor BACH1 is recruited to the nucleus by its novel alternative spliced isoform. *J. Biol. Chem.* 276: 7278-7284.
- Sasaki, S., et al. 2000. Cloning and expression of human B cell-specific transcription factor BACH2 mapped to chromosome 6q15. *Oncogene* 19: 3739-3749.
- Kobayashi, A., et al. 2000. A combinatorial code for gene expression generated by transcription factor BACH2 and MAZR (MAZ-related factor) through the BTB/POZ domain. *Mol. Cell. Biol.* 20: 1733-1746.

CHROMOSOMAL LOCATION

Genetic locus: BACH1 (human) mapping to 21q21.3; Bach1 (mouse) mapping to 16 C3.3.

SOURCE

BACH1 (L-25) is a mouse monoclonal antibody raised against recombinant BACH1 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

PROTOCOLS

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

APPLICATIONS

BACH1 (L-25) is recommended for detection of BACH1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for BACH1 siRNA (h): sc-37064, BACH1 siRNA (m): sc-37065, BACH1 shRNA Plasmid (h): sc-37064-SH, BACH1 shRNA Plasmid (m): sc-37065-SH, BACH1 shRNA (h) Lentiviral Particles: sc-37064-V and BACH1 shRNA (m) Lentiviral Particles: sc-37065-V.

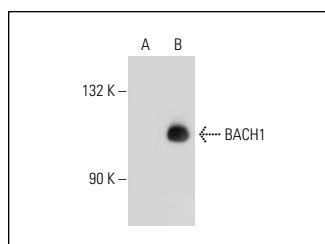
Molecular Weight of BACH1: 92 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, HEL 92.1.7 cell lysate: sc-2270 or BACH1 (m): 293T Lysate: sc-118662.

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).

DATA



BACH1 (L-25): sc-100995. Western blot analysis of BACH1 expression in non-transfected: sc-117752 (A) and mouse BACH1 transfected: sc-118662 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Tamgue, O., et al. 2019. Differential targeting of c-Maf, Bach-1, and Elmo-1 by microRNA-143 and microRNA-365 promotes the intracellular growth of *Mycobacterium tuberculosis* in alternatively IL-4/IL-13 activated macrophages. *Front. Immunol.* 10: 421.
- Bao, S., et al. 2020. Agriophyllum oligosaccharides ameliorate hepatic injury in type 2 diabetic db/db mice targeting INS-R/IRS-2/PI3K/Akt/PPAR-γ/Glut4 signal pathway. *J. Ethnopharmacol.* E-published.

RESEARCH USE

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