

# BACH1 (C-20): sc-14700

## 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

BACH1 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of BACH1 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-14700 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-14700 X, 200 µg/0.1 ml.

## APPLICATIONS

BACH1 (C-20) 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)], 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). BACH1 (C-20) is also recommended for detection of Bach1 in additional species, including bovine.

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.

BACH1 (C-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of BACH1: 92 kDa.

Positive Controls: HEL 92.1.7 cell lysate: sc-2270, K-562 whole cell lysate: sc-2203 or U-2 OS cell lysate: sc-2295.

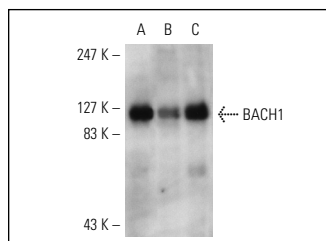
## STORAGE

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.

## DATA



BACH1 (C-20): sc-14700. Western blot analysis of BACH1 expression in K-562 (A), U-2 OS (B) and HEL 92.1.7 (C) whole cell lysates.

## SELECT PRODUCT CITATIONS

- Shim, K.S., et al. 2003. Aberrant protein expression of transcription factors BACH1 and ERG, both encoded on chromosome 21, in brains of patients with Down syndrome and Alzheimer's disease. *J. Neural Transm. Suppl.* 67: 39-49.
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- Yun, J., et al. 2011. Signalling pathway for RKIP and Let-7 regulates and predicts metastatic breast cancer. *EMBO J.* 30: 4500-4514.
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- Zucker, S.N., et al. 2014. Nrf2 amplifies oxidative stress via induction of Klf9. *Mol. Cell* 53: 916-928.
- Wang, D., et al. 2015. Hypermethylation of the Keap1 gene inactivates its function, promotes Nrf2 nuclear accumulation, and is involved in arsenite-induced human keratinocyte transformation. *Free Radic. Biol. Med.* 89: 209-219.

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