#12809 Store at -20°C

BACH2 Antibody

☑ 100 µl
(10 western blots)

Cell Signaling TECHNOLOGY®

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New 06/13

For Research Use Only. Not For Use In Diagnostic Procedures.

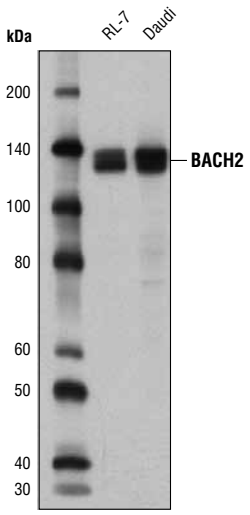
Entrez Gene ID #60468
UniProt ID #Q9BYV9

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H	130 kDa	Rabbit**

Background: The transcription regulator BTB and CNC homolog 2 (BACH2) is a bZIP domain-containing transcriptional repressor that dimerizes with MafK and binds Maf recognition elements (MAREs) to regulate transcription (1,2). BACH2 is part of a network of transcription factors that controls the transition of activated B cells into either antibody-producing plasma cells or memory B cells (3-5). Plasma cell differentiation requires the transcription factor Blimp1 (6). BACH2 suppresses expression of Blimp1 in activated B cells, which delays plasma cell differentiation and allows time for class switch recombination and somatic hypermutation (3-5). Genome-wide association studies have linked the genetic locus containing BACH2 to several immune-related disorders including type 1 diabetes, celiac disease, Crohn's disease, and the skin condition known as vitiligo (7-10).

Specificity/Sensitivity: BACH2 Antibody recognizes endogenous levels of total BACH2 protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala304 of human BACH2 protein. Antibodies are purified by protein A and peptide affinity chromatography.



Western blot analysis of extracts from RL-7 and Daudi cells using BACH2 Antibody.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. *Do not aliquot the antibody.*

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:
Western blotting 1:1000

For product specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended complementary products.

Background References:

(1) Oyake, T. et al. (1996) *Mol Cell Biol* 16, 6083-95.
(2) Muto, A. et al. (1998) *EMBO J* 17, 5734-43.
(3) Muto, A. et al. (2004) *Nature* 429, 566-71.
(4) Ochiai, K. et al. (2006) *J Biol Chem* 281, 38226-34.
(5) Muto, A. et al. (2010) *EMBO J* 29, 4048-61.
(6) Shaffer, A.L. et al. (2002) *Immunity* 17, 51-62.
(7) Cooper, J.D. et al. (2008) *Nat Genet* 40, 1399-401.
(8) Dubois, P.C. et al. (2010) *Nat Genet* 42, 295-302.
(9) Franke, A. et al. (2010) *Nat Genet* 42, 1118-25.
(10) Jin, Y. et al. (2012) *Nat Genet* 44, 676-80.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide
Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.