Datasheet for ABIN1118465

anti-BACH2 antibody (N-Term)

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1 Image

Overview

Quantity:	100 µg
Target:	BACH2
Binding Specificity:	N-Term
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This BACH2 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunoprecipitation (IP)

Product Details

Immunogen:	Anti-Bach2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to the n-terminus region of the Bach2 protein. Immunogen Type: Peptide
Isotype:	IgG
Specificity:	Bach2 antibody is directed against mouse Bach2 (n-terminus) protein. Anti-Bach-2 was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest 100% homology with Bach2 protein from mouse. Reactivity against homologues from other sources is not known.
Characteristics:	During an immune response to infectious diseases and cancer, B-cells undergo activation in response to antigen, and differentiate either into short-lived plasma cells, whose numbers

Product Details

	contract following withdrawal of the antigenic stimulus, or into memory B-cells. The formation of B-cell memory is the major goal of vaccination, since memory B-cells are able to produce antibodies specific to infections and cancer that can last for the lifetime of the host. Recently it has been shown that the formation of long-lived memory B-cells is dependent upon the transcription factor Bach2, since knockout mice lacking the gene fail to generate class-switched IgG antibody responses and all B-cells undergo default plasma cell differentiation upon antigenic stimulation. While the mechanism by which Bach2 controls B-cell memory fate has been elucidated (it binds and represses the promoter of the gene that encodes the plasma cell master regulatory transcription factor Blimp-1), the upstream mechanism by which the function of Bach2 is regulated is unknown. There is evidence suggesting that Bach2 is phosphorylated in B-cells following stimulation and suspect that this modification may allow the B-cell signaling apparatus to control Bach2 activity and therefore memory fate decisions. Anti-Bach2 is ideal for researchers interested in Cancer and DNA Damage & Repair research.
Purification:	affinity purified
Sterility:	Sterile filtered

Target Details

Target:	BACH2
Alternative Name:	Bach2 (BACH2 Products)
Background:	This antibody is designed, produced, and is suitable for Cancer and DNA Damage & Repair research. During an immune response to infectious diseases and cancer, B-cells undergo activation in response to antigen, and differentiate either into short-lived plasma cells, whose numbers contract following withdrawal of the antigenic stimulus, or into memory B-cells. The formation of B-cell memory is the major goal of vaccination, since memory B-cells are able to produce antibodies specific to infections and cancer that can last for the lifetime of the host. Recently it has been shown that the formation of long-lived memory B-cells is dependent upon the transcription factor Bach2, since knockout mice lacking the gene fail to generate class-switched IgG antibody responses and all B-cells undergo default plasma cell differentiation upon antigenic stimulation. While the mechanism by which Bach2 controls B-cell memory fate has been elucidated (it binds and represses the promoter of the gene that encodes the plasma cell master regulatory transcription factor Blimp-1), the upstream mechanism by which the function of Bach2 is regulated is unknown. There is evidence suggesting that Bach2 is phosphorylated in B-cells following stimulation and suspect that this modification may allow the B-cell signaling apparatus to control Bach2 activity and therefore memory fate decisions.

Target Details

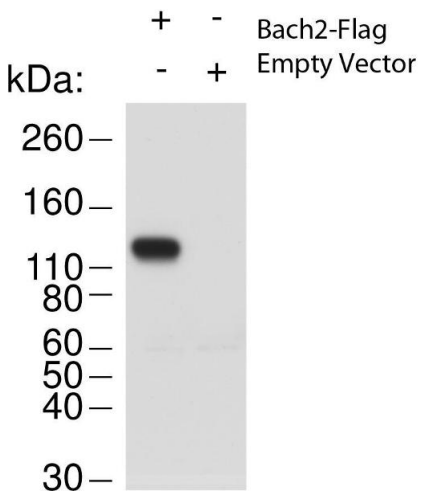
	Anti-Bach2 is ideal for researchers interested in Cancer and DNA Damage & Repair research. Synonyms: BTB and CNC homology 1, basic leucine zipper transcription factor 2
Gene ID:	12014

Application Details

Application Notes:	Affinity purified Bach-2 antibody has been tested for use in ELISA, Immunoprecipitation, and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 91-140 kDa in size corresponding to Bach2 protein by western blotting in the appropriate cell lysate or extract.
Comment:	Gene Name: Bach2
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.97 mg/mL
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	Sodium azide
Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C/-20 °C
Storage Comment:	Store vial at 4 °C prior to restoration. For extended storage aliquot contents and freeze at -20 °C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4 °C as an undiluted liquid. Dilute only prior to immediate use. Expiration date is one (1) year from date of opening.
Expiry Date:	12 months



Western Blotting

Image 1. Western Blot of Rabbit anti-Bach2 antibody. Lane 1: 293T cell lysates overexpressing Bach2-Flag. Lane 2: 293T cell lysates. Load: 20 µg per lane. Primary antibody: Bach-2 antibody at 1:1000 for overnight at 4°C. Secondary antibody: rabbit HRP secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted (native)/Observed (over-expressed) size: 91.7 kDa, ~130 kDa for Bach2. Other band(s): none.

