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Anti-BACH1 (RABBIT) Antibody
BACH1 Antibody
Catalog # ASR5236

Specification

Anti-BACH1 (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human**
Clonality	**Polyclonal**
Application	**WB, E, I, LCI**
Application Note	**This affinity purified antibody has been tested for use in ELISA and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 105 -140 kDa in size corresponding to isoforms of BACH1 protein by western blotting in the appropriate cell lysate or extract.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a recombinant protein corresponding to amino acids 92-104 of isoform 1 of human BACH1 protein.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-BACH1 (RABBIT) Antibody - Additional Information

Gene ID 83990

Other Names
83990

Purity
This affinity purified antibody is directed against human BACH1 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross reactivity with BACH1 protein from human (100% homology) and chimpanzee (92% homology). Expect reactivity with isoform 1 and isoform 2 of BACH1. Reactivity against BACH1 homologues from rat and mouse is not expected. Reactivity against homologues from other sources is not known.

Storage Condition
Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. 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.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-BACH1 (RABBIT) Antibody - Protein Information

Name BRIP1 (HGNC:20473)

Function
DNA-dependent ATPase and 5'-3' DNA helicase required for the maintenance of chromosomal stability (PubMed:11301010, PubMed:14983014, PubMed:16116421, PubMed:16153896, PubMed:17596542, PubMed:36608669). Acts late in the Fanconi anemia pathway, after FANCD2 ubiquitination (PubMed:14983014, PubMed:16153896). Involved in the repair of DNA double-strand breaks by homologous recombination in a manner that depends on its association with BRCA1 (PubMed:14983014, PubMed:16153896). Involved in the repair of abasic sites at replication forks by promoting the degradation of DNA-protein cross-links: acts by catalyzing unfolding of HMCES DNA-protein cross-link via its helicase activity, exposing the underlying DNA and enabling cleavage of the DNA- protein adduct by the SPRTN metalloprotease (PubMed:16116421, PubMed:36608669). Can unwind RNA:DNA substrates (PubMed:14983014). Unwinds G-quadruplex DNA; unwinding requires a 5'-single stranded tail (PubMed:18426915, PubMed:20639400).

Cellular Location
Nucleus. Cytoplasm

Tissue Location
Ubiquitously expressed, with highest levels in testis.

Anti-BACH1 (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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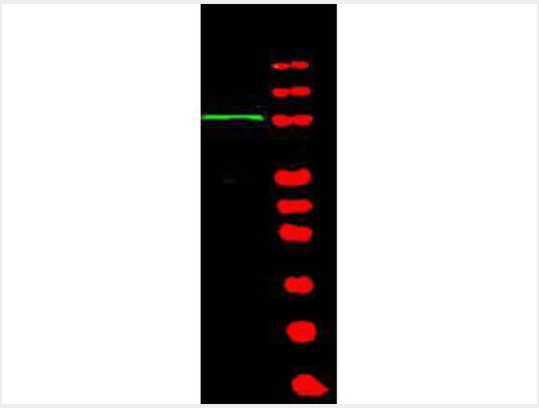
Anti-BACH1 (RABBIT) Antibody - Images



Western blot using Rockland's Affinity Purified anti-BACH1 antibody shows detection of a band at ~105 kDa (lane 1) corresponding to human BACH1 present in a 293 whole cell lysate (p/n W09-000-365). Approximately 35 µg of lysate was separated on a 4-20% Tris-Glycine gel by SDS-PAGE and transferred onto nitrocellulose. After blocking the membrane was probed with the primary antibody diluted to 1:1,000. Reaction occurred 2 h at room temperature followed by washes and reaction with a 1:10,000 dilution of IRDye™800 conjugated Gt-a-Rabbit IgG [H&L] MX (p/n 611-132-122) for 45 min at room temperature (800 nm channel, green). Molecular weight estimation was made by comparison to prestained MW markers in lane M (700 nm channel, red). IRDye™800 fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.

Anti-BACH1 (RABBIT) Antibody - Background

BACH1 (also known as BRCA1 interacting protein C-terminal helicase 1, BRCA1-interacting protein 1 and BRCA1-associated C-terminal helicase 1) is a member of the RecQ DEAH helicase family and interacts with the BRCT repeats of breast cancer, type 1 (BRCA1). The bound complex is important in the normal double-strand break repair function of breast cancer, type 1 (BRCA1). The BACH1 gene may be a target of germline cancer-inducing mutations. BACH1 is localized within the nucleus and functions as a DNA-dependent ATPase and 5' to 3' DNA helicase. Two isoforms have been identified for this protein.