

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

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**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](http://www.uniprot.org/citations/11301010)), PubMed: [14983014](http://www.uniprot.org/citations/14983014), PubMed: [16116421](http://www.uniprot.org/citations/16116421), PubMed: [16153896](http://www.uniprot.org/citations/16153896), PubMed: [17596542](http://www.uniprot.org/citations/17596542), PubMed: [36608669](http://www.uniprot.org/citations/36608669)). Acts late in the Fanconi anemia pathway, after FANCD2 ubiquitination (PubMed: [14983014](http://www.uniprot.org/citations/14983014), PubMed: [16153896](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/14983014), PubMed: [16153896](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/16116421), PubMed: [36608669](http://www.uniprot.org/citations/36608669)). Can unwind RNA:DNA substrates (PubMed: [14983014](http://www.uniprot.org/citations/14983014)). Unwinds G-quadruplex DNA; unwinding requires a 5'-single stranded tail (PubMed: [18426915](http://www.uniprot.org/citations/18426915), PubMed: [20639400](http://www.uniprot.org/citations/20639400)).

#### Cellular Location

Nucleus. Cytoplasm

#### Tissue Location

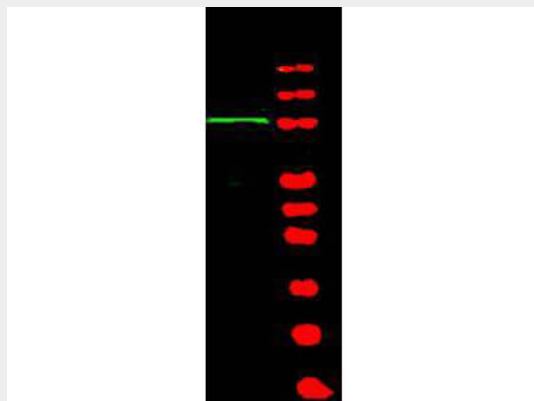
Ubiquitously expressed, with highest levels in testis.

### 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 Cytometry](#)
- [Cell Culture](#)

## 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  $\mu$ g 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.