abcam

Product datasheet

Anti-BACH1/BRIP1 antibody ab49657

9 References 2 Images

Overview

Product name	Anti-BACH1/BRIP1 antibody
Description	Rabbit polyclonal to BACH1/BRIP1
Host species	Rabbit
Tested applications	**Suitable for:** WB, ICC
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide: NFKPSPSKNKGMFPGFK conjugated to KLH by a N terminal Cysteine residue linker, corresponding to amino acids 1233-1249 of Human BACH1/BRIP1 Run BLAST with Run BLAST with
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.097% Sodium azide Constituent: 0.0268% PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab49657 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 0.5 - 1 µg/ml. Predicted molecular weight: 141 kDa.
ICC		Use a concentration of 10 - 20 µg/ml.

Target

Function DNA-dependent ATPase and 5' to 3' DNA helicase required for the maintenance of chromosomal stability. Acts late in the Fanconi anemia pathway, after FANCD2 ubiquitination. Involved in the repair of DNA double-strand breaks by homologous recombination in a manner that depends on its association with BRCA1.

Tissue specificity Ubiquitously expressed, with highest levels in testis.

Involvement in disease Defects in BRIP1 are a cause of susceptibility to breast cancer (BC) [MIM:114480]. A common malignancy originating from breast epithelial tissue. Breast neoplasms can be distinguished by their histologic pattern. Invasive ductal carcinoma is by far the most common type. Breast cancer is etiologically and genetically heterogeneous. Important genetic factors have been indicated by familial occurrence and bilateral involvement. Mutations at more than one locus can be involved in different families or even in the same case.
Defects in BRIP1 are the cause of Fanconi anemia complementation group J (FANCJ) [MIM:609054]. It is a disorder affecting all bone marrow elements and resulting in anemia, leukopenia and thrombopenia. It is associated with cardiac, renal and limb malformations, dermal pigmentary changes, and a predisposition to the development of malignancies. At the cellular level it is associated with hypersensitivity to DNA-damaging agents, chromosomal instability (increased chromosome breakage) and defective DNA repair.

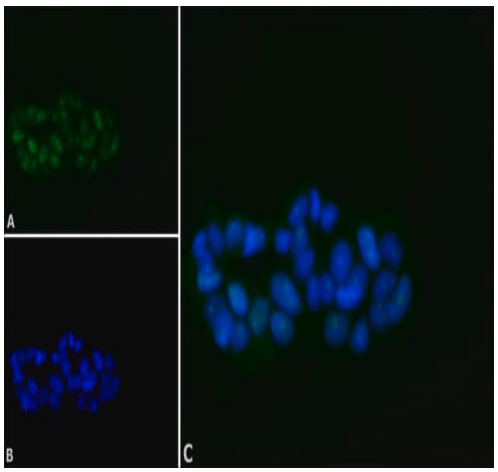
Sequence similarities Belongs to the DEAD box helicase family. DEAH subfamily.
Contains 1 helicase ATP-binding domain.

Domain 4Fe-4S iron-sulfur-binding is required for helicase activity (PubMed:20639400).

Post-translational modifications Phosphorylated. Phosphorylation is necessary for interaction with BRCA1, and is cell-cycle regulated.

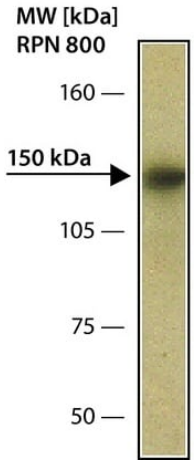
Cellular localization Nucleus.

Images



Immunocytochemistry - Anti-BACH1/BRIP1 antibody (ab49657)

Immunocytochemistry analysis of MCF-7 cells labeling BACH1/BRIP1 with ab49657 at 20 µg/mL followed by Goat Anti-Rabbit IgG (whole molecule)-FITC secondary antibodyat 1/100. Cells were fixed and permeabilized with 4% paraformaldehyde. Panel C: cells were counterstained with DAPI (blue) to stain nuclei (Panel A: without DAPI, Panel B: only DAPI).



Western blot - Anti-BACH1/BRIP1 antibody (ab49657)

Anti-BACH1/BRIP1 antibody (ab49657) at 1/2000 dilution + MCF-7 cell lysate

Secondary
HRP conjugated Anti-Rabbit IgG antibody

Developed using the ECL technique.

Predicted band size: 141 kDa

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