

Product datasheet

Anti-BRCC45/BRE antibody [EPR11858] ab177960

KO VALIDATED Recombinant RabMAB

[2 References](#) [6 Images](#)

Overview

Product name	Anti-BRCC45/BRE antibody [EPR11858]
Description	Rabbit monoclonal [EPR11858] to BRCC45/BRE
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF, IHC-P Unsuitable for: Flow Cyt or IP
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat 
Immunogen	Synthetic peptide within Human BRCC45/BRE aa 1-100. The exact sequence is proprietary. Database link: Q9NXR7
Positive control	WB: HeLa, SH-SY5Y, Daudi and Raji cell lysates; Fetal brain and human placenta tissue lysates. IHC-P: Human lung adenocarcinoma and pancreas tissue. ICC/IF: MCF-7 cells.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here . Our RabMAB [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB[®] patents .

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 long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Tissue culture supernatant

Clonality	Monoclonal
Clone number	EPR11858
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab177960 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		1/1000 - 1/10000. Predicted molecular weight: 44 kDa.
ICC/IF		1/50 - 1/100.
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Application notes Is unsuitable for Flow Cyt or IP.

Target

Function Component of the BRCA1-A complex, a complex that specifically recognizes 'Lys-63'-linked ubiquitinated histones H2A and H2AX at DNA lesions sites, leading to target the BRCA1-BARD1 heterodimer to sites of DNA damage at double-strand breaks (DSBs). The BRCA1-A complex also possesses deubiquitinase activity that specifically removes 'Lys-63'-linked ubiquitin on histones H2A and H2AX. In the BRCA1-A complex, it acts as an adapter that bridges the interaction between BABAM1/NBA1 and the rest of the complex, thereby being required for the complex integrity and modulating the E3 ubiquitin ligase activity of the BRCA1-BARD1 heterodimer. Probably also plays a role as a component of the BRISC complex, a multiprotein complex that specifically cleaves 'Lys-63'-linked ubiquitin. May play a role in homeostasis or cellular differentiation in cells of neural, epithelial and germline origins. May also act as a death receptor-associated anti-apoptotic protein, which inhibits the mitochondrial apoptotic pathway. May regulate TNF-alpha signaling through its interactions with TNFRSF 1A; however these effects may be indirect.

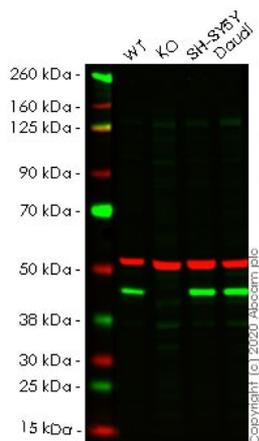
Tissue specificity Expressed in all cell lines examined. Highly expressed in placenta.

Sequence similarities Belongs to the BRE family.

Domain Contains 2 ubiquitin-conjugating enzyme family-like (UEV-like) regions. These regions lack the critical Cys residues required for ubiquitination but retain the ability to bind ubiquitin.

Cellular localization Cytoplasm. Nucleus. Localizes at sites of DNA damage at double-strand breaks.

Images



Western blot - Anti-BRCC45/BRE antibody [EPR11858] (ab177960)

All lanes : Anti-BRCC45/BRE antibody [EPR11858] (ab177960) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : BRCC45/BRE knockout HeLa cell lysate

Lane 3 : SH-SY5Y cell lysate

Lane 4 : Daudi cell lysate

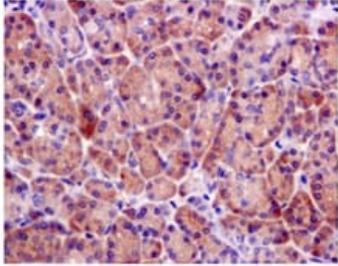
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 44 kDa

Lanes 1-4: Merged signal (red and green). Green - ab177960 observed at 44 kDa. Red - loading control **ab7291** observed at 50 kDa.

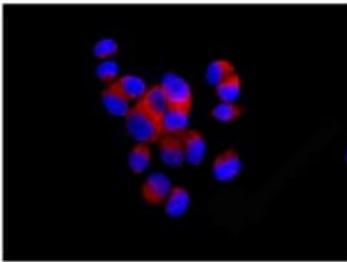
ab177960 Recombinant Anti-BRE antibody [EPR11858] was shown to specifically react with BRE in wild-type HeLa cells. Loss of signal was observed when knockout cell line **ab264928** (knockout cell lysate **ab257861**) was used. Wild-type and BRE knockout samples were subjected to SDS-PAGE. ab177960 and Anti-alpha Tubulin antibody [DM1A] - Loading Control (**ab7291**) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-BRCC45/BRE antibody [EPR11858] (ab177960)

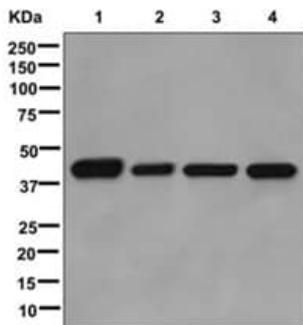
Immunohistochemical analysis of Human pancreas tissue labeling BRCC45/BRE using ab177960 at 1/50 dilution.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-BRCC45/BRE antibody [EPR11858] (ab177960)

Immunofluorescence analysis of MCF-7 cells labeling BRCC45/BRE using ab177960 at 1/50 dilution.



Western blot - Anti-BRCC45/BRE antibody [EPR11858] (ab177960)

All lanes : Anti-BRCC45/BRE antibody [EPR11858] (ab177960) at 1/1000 dilution

Lane 1 : fetal brain lysate

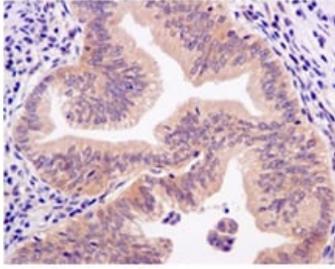
Lane 2 : Human placenta lysate

Lane 3 : HeLa cell lysate

Lane 4 : Raji cell lysate

Lysates/proteins at 10 μ g per lane.

Predicted band size: 44 kDa



Immunohistochemical analysis of Human lung adenocarcinoma tissue labeling BRCC45/BRE using ab177960 at 1/50 dilution.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-BRCC45/BRE antibody [EPR11858] (ab177960)

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-BRCC45/BRE antibody [EPR11858] (ab177960)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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