

## Anti-BRE Antibody

Rabbit polyclonal antibody to BRE Catalog # AP61018

## Specification

# Anti-BRE Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB <u>Q9NXR7</u> <u>Q8K3W0</u> Human, Mouse, Rat Rabbit Polyclonal 43552

## Anti-BRE Antibody - Additional Information

Gene ID 9577

**Other Names** BRCC45; BRCA1-A complex subunit BRE; BRCA1/BRCA2-containing complex subunit 45; Brain and reproductive organ-expressed protein

**Target/Specificity** KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human BRE. The exact sequence is proprietary.

Dilution WB~~WB (1/500 - 1/1000)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

# Anti-BRE Antibody - Protein Information

Name BABAM2 (HGNC:1106)

Synonyms BRCC45, BRE

#### 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 (PubMed:<a href="http://www.uniprot.org/citations/17525341"



target=" blank">17525341</a>, PubMed:<a href="http://www.uniprot.org/citations/19261746" target="blank">19261746</a>, PubMed:<a href="http://www.uniprot.org/citations/19261748" target="blank">19261748</a>, PubMed:<a href="http://www.uniprot.org/citations/19261749" target=" blank">19261749</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/19261748" target=" blank">19261748</a>, PubMed:<a href="http://www.uniprot.org/citations/21282113" target=" blank">21282113</a>). Component of the BRISC complex, a multiprotein complex that specifically cleaves 'Lys-63'-linked ubiquitin in various substrates (PubMed:<a href="http://www.uniprot.org/citations/19214193" target=" blank">19214193</a>, PubMed:<a href="http://www.uniprot.org/citations/24075985" target=" blank">24075985</a>, PubMed:<a href="http://www.uniprot.org/citations/25283148" target=" blank">25283148</a>, PubMed:<a href="http://www.uniprot.org/citations/26195665" target=" blank">26195665</a>). Within the BRISC complex, acts as an adapter that bridges the interaction between BABAM1/NBA1 and the rest of the complex, thereby being required for the complex integrity (PubMed:<a href="http://www.uniprot.org/citations/21282113" target=" blank">21282113</a>). The BRISC complex is required for normal mitotic spindle assembly and microtubule attachment to kinetochores via its role in deubiguitinating NUMA1 (PubMed:<a href="http://www.uniprot.org/citations/26195665" target=" blank">26195665</a>). The BRISC complex plays a role in interferon signaling via its role in the deubiquitination of the interferon receptor IFNAR1; deubiquitination increases IFNAR1 activity by enhancing its stability and cell surface expression (PubMed: <a href="http://www.uniprot.org/citations/24075985" target=" blank">24075985</a>). Down-regulates the response to bacterial lipopolysaccharide (LPS) via its role in IFNAR1 deubiguitination (PubMed:<a

href="http://www.uniprot.org/citations/24075985" target="\_blank">24075985</a>). 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 TNFRSF1A; however these effects may be indirect (PubMed:<a

href="http://www.uniprot.org/citations/15465831" target="\_blank">15465831</a>).

**Cellular Location** 

Cytoplasm. Nucleus Note=Localizes at sites of DNA damage at double-strand breaks (DSBs)

**Tissue Location** 

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

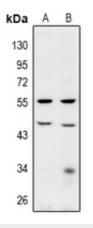
#### Anti-BRE Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-BRE Antibody - Images





Western blot analysis of BRE expression in HCT116 (A), HEK293T (B) whole cell lysates.

# Anti-BRE Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human BRE. The exact sequence is proprietary.