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Anti-BRE Antibody

Catalog # AP61018

Product Information

Application	WB
Primary Accession	Q9NXR7
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	43552

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 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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:17525341, PubMed:19261746, PubMed:19261748, PubMed:19261749). 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:19261748, PubMed:21282113). Component of the BRISC complex, a multiprotein complex that specifically cleaves 'Lys-63'-linked ubiquitin in various substrates (PubMed:19214193, PubMed:24075985,

PubMed:25283148, PubMed:26195665). 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:21282113). The BRISC complex is required for normal mitotic spindle assembly and microtubule attachment to kinetochores via its role in deubiquitinating NUMA1 (PubMed:26195665). 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:24075985). Down-regulates the response to bacterial lipopolysaccharide (LPS) via its role in IFNAR1 deubiquitination (PubMed:24075985). 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 signaling through its interactions with TNFRSF1A; however these effects may be indirect (PubMed:15465831).

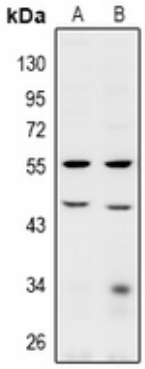
Cellular Location

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.

Images



Western blot analysis of BRE expression in HCT116 (A), HEK293T (B) whole cell lysates. (Predicted band size: 43 kD; Observed band size: 45 kD)

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