10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

BRCC45 / BRE Antibody (Internal)
Rabbit Polyclonal Antibody
Catalog # ALS17199

Specification

BRCC45 / BRE Antibody (Internal) - Product Information

Application	**IHC-P, WB**
Primary Accession	Q9NXR7
Other Accession	9577
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**43552**

BRCC45 / BRE Antibody (Internal) - Additional Information

Gene ID 9577

Other Names
BRE, BRCA1-A complex subunit BRE, BRCC45, BRCC4

Target/Specificity
Human BRCC45 / BRE

Reconstitution & Storage
0.1 M Tris-glycine, pH 7.0, 10% glycerol, 0.01% Thimerosal. Keep as concentrated solution. Aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.

Precautions
BRCC45 / BRE Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

BRCC45 / BRE Antibody (Internal) - 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:19261749, PubMed:<a href="http://www.uniprot.org/citations/19261748"

target="_blank">19261748). 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:21282113, PubMed:19261748). 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-alpha 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.

Volume
50 µl

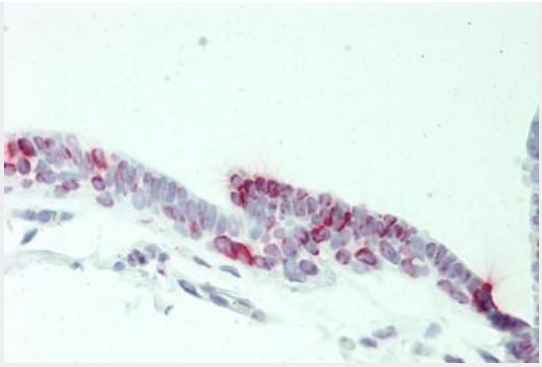
BRCC45 / BRE Antibody (Internal) - Protocols

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

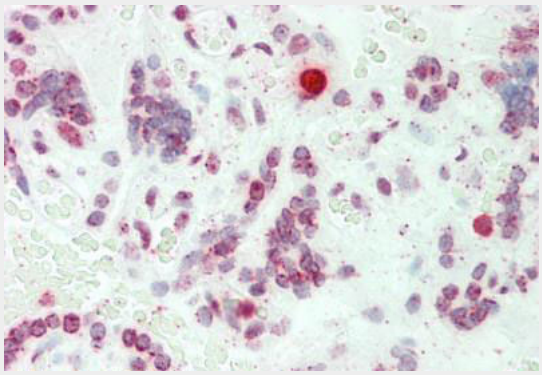
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

BRCC45 / BRE Antibody (Internal) - Images

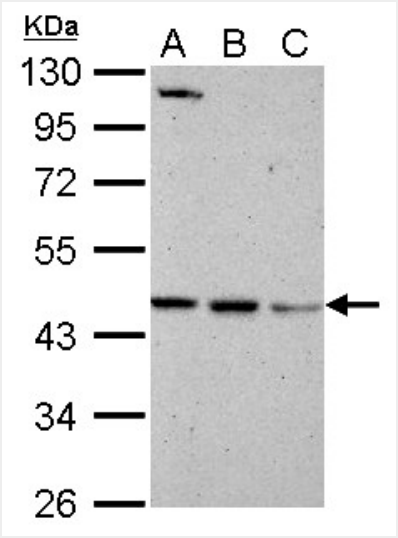
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Human Breast: Formalin-Fixed, Paraffin-Embedded (FFPE)

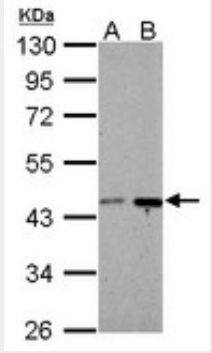


Human Placenta: Formalin-Fixed, Paraffin-Embedded (FFPE)

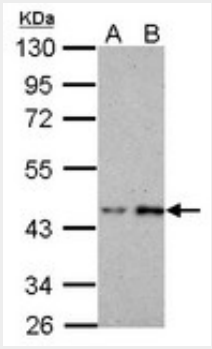


BRCC45 antibody detects BRE protein by Western blot analysis.

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BRCC45 / BRE Antibody (Internal) - Background

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BRCC45 / BRE Antibody (Internal) - References

Li L.,et al.Biochem. Biophys. Res. Commun. 206:764-774(1995).
Ching A.K.K.,et al.Biochem. Biophys. Res. Commun. 288:535-545(2001).
Dong Y.,et al.Mol. Cell 12:1087-1099(2003).
Keeton K.R.,et al.Submitted (JUL-1997) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).