

BRCC3 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21820a

Specification

BRCC3 Antibody (N-Term) - Product Information

Application	WB,E
Primary Accession	<u>P46736</u>
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	36072

BRCC3 Antibody (N-Term) - Additional Information

Gene ID 79184

Other Names

Lys-63-specific deubiquitinase BRCC36, 3419-, BRCA1-A complex subunit BRCC36, BRCA1/BRCA2-containing complex subunit 3, BRCA1/BRCA2-containing complex subunit 36, BRISC complex subunit BRCC36, BRCC3, BRCC36, C61A, CXorf53

Target/Specificity

This BRCC3 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 18-50 amino acids from human BRCC3.

Dilution WB~~1:2000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

BRCC3 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

BRCC3 Antibody (N-Term) - Protein Information

Name BRCC3

Synonyms BRCC36, C6.1A, CXorf53



Function Metalloprotease that specifically cleaves 'Lys-63'-linked polyubiquitin chains (PubMed:19214193, PubMed:20656690, PubMed:24075985, PubMed:26344097). Does not have activity toward 'Lys- 48'-linked polyubiguitin chains (PubMed: 19214193, PubMed: 20656690, PubMed:24075985, PubMed:26344097). 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) (PubMed:<u>14636569</u>, PubMed:<u>16707425</u>, PubMed:<u>17525341</u>, PubMed:<u>19202061</u>, PubMed:19261746, PubMed:19261748, PubMed:19261749). In the BRCA1-A complex, it specifically removes 'Lys-63'-linked ubiquitin on histones H2A and H2AX, antagonizing the RNF8-dependent ubiquitination at double-strand breaks (DSBs) (PubMed: 20656690). Catalytic subunit of the BRISC complex, a multiprotein complex that specifically cleaves 'Lys-63'-linked ubiquitin in various substrates (PubMed:20656690, PubMed:24075985, PubMed:26195665, PubMed: 26344097). Mediates the specific 'Lys-63'-specific deubiquitination associated with the COP9 signalosome complex (CSN), via the interaction of the BRISC complex with the CSN complex (PubMed: <u>19214193</u>). The BRISC complex is required for normal mitotic spindle assembly and microtubule attachment to kinetochores via its role in deubiguitinating NUMA1 (PubMed: <u>26195665</u>). 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, PubMed: 26344097). Acts as a regulator of the NLRP3 inflammasome by mediating deubiquitination of NLRP3, leading to NLRP3 inflammasome assembly (By similarity). Down- regulates the response to bacterial lipopolysaccharide (LPS) via its role in IFNAR1 deubiquitination (PubMed:24075985). Deubiquitinates HDAC1 and PWWP2B leading to their stabilization (By similarity).

Cellular Location

Nucleus. Cytoplasm. Cytoplasm, cytoskeleton, spindle pole Note=Localizes at sites of DNA damage at double-strand breaks (DSBs) (PubMed:20656690, PubMed:26344097). Interaction with ABRAXAS2 retains BRCC3 in the cytoplasm (PubMed:20656690).

Tissue Location

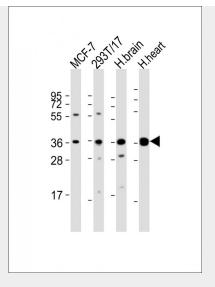
Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Aberrantly expressed in the vast majority of breast tumors.

BRCC3 Antibody (N-Term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- BRCC3 Antibody (N-Term) Images





All lanes : Anti-BRCC3 Antibody (N-Term) at 1:2000 dilution Lane 1: MCF-7 whole cell lysate Lane 2: 293T/17 whole cell lysate Lane 3: human brain lysate Lane 4: human heart lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 36 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

BRCC3 Antibody (N-Term) - Background

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BRCC3 Antibody (N-Term) - References

Kenwrick S., et al.Hum. Mol. Genet. 1:179-186(1992). Fisch P., et al.Oncogene 8:3271-3276(1993). Dong Y., et al.Mol. Cell 12:1087-1099(2003). Ota T., et al.Nat. Genet. 36:40-45(2004). Ross M.T., et al.Nature 434:325-337(2005).