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BRCC3 antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI14755

Product Information

Application	WB
Primary Accession	P46736
Other Accession	NM_024332, NP_077308
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Pig, Chicken, Guinea Pig, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	36072

Additional Information

Gene ID	79184
Alias Symbol	BRCC36, C6.1A, CXorf53, RP11-143H17.2
Other Names	Lys-63-specific deubiquitinase BRCC36, 3.4.19.-, BRCA1-A complex subunit BRCC36, BRCA1/BRCA2-containing complex subunit 3, BRCA1/BRCA2-containing complex subunit 36, BRISC complex subunit BRCC36, BRCC3, BRCC36, C6.1A, CXorf53
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-BRCC3 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	BRCC3 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

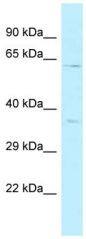
Name	BRCC3
Synonyms	BRCC36, C6.1A, CXorf53
Function	Metalloprotease that specifically cleaves 'Lys-63'-linked polyubiquitin chains (PubMed:19214193, PubMed:20656690, PubMed:24075985, PubMed:26344097). Does not have activity toward 'Lys- 48'-linked polyubiquitin chains (PubMed:19214193, PubMed:20656690, 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:14636569, PubMed:16707425, PubMed:17525341, PubMed:19202061, 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:19214193). The BRISC complex is required for normal mitotic spindle assembly and microtubule attachment to kinetochores via its role in deubiquitinating NUMA1 (PubMed:26195665). 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.

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).

Images



WB Suggested Anti-BRCC3 Antibody Titration: 1.0 µg/ml
Positive Control: MDA-MB-435S Whole Cell