

BRCC36 Rabbit mAb

Catalog # AP75167

Product Information

ApplicationWB, IPPrimary AccessionP46736

Reactivity Human, Mouse, Rat

Host Rabbi

Clonality Monoclonal Antibody

Calculated MW 36072

Additional Information

Gene ID 79184

Other Names BRCC3

Dilution WB~~1/500-1/1000 IP~~N/A

Format Liquid

Protein Information

Name BRCC3

Synonyms BRCC36, C6.1A, CXorf53

Function Metalloprotease that specifically cleaves 'Lys-63'-linked polyubiquitin chains

(PubMed:<u>19214193</u>, PubMed:<u>20656690</u>, PubMed:<u>24075985</u>, PubMed:<u>26344097</u>). 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:<u>14636569</u>, PubMed:<u>16707425</u>, PubMed:<u>17525341</u>, PubMed:<u>19202061</u>, PubMed:<u>19261746</u>, PubMed:<u>19261748</u>,

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: <u>20656690</u>). 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).

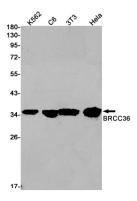
Cellular Location

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.

Images



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