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BRCC3 Blocking Peptide (N-Term)

Synthetic peptide
Catalog # BP21929a

Specification

BRCC3 Blocking Peptide (N-Term) - Product Information

Primary Accession	P46736
Other Accession	B0KWU8, Q5R9L6

BRCC3 Blocking Peptide (N-Term) - Additional Information

Gene ID 79184

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

Target/Specificity
The synthetic peptide sequence is selected from aa 56-70 of HUMAN BRCC3

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

BRCC3 Blocking Peptide (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 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:19202061, PubMed:16707425, PubMed:17525341, PubMed:19261748, PubMed:19261749, PubMed:19261746). 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.

BRCC3 Blocking Peptide (N-Term) - Protocols

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

- Blocking Peptides

BRCC3 Blocking Peptide (N-Term) - Images

BRCC3 Blocking Peptide (N-Term) - Background

Metalloprotease that specifically cleaves 'Lys-63'- linked polyubiquitin chains. Does not have activity toward 'Lys- 48'-linked polyubiquitin chains. 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). 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). Catalytic subunit of the BRISC complex, a multiprotein complex that specifically cleaves 'Lys-63'-linked ubiquitin in various substrates. 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.

BRCC3 Blocking Peptide (N-Term) - References

Kenwrick S.,et al.Hum. Mol. Genet. 1:179-186(1992).
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