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BAP1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP2168a

Specification

BAP1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q92560

BAP1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 8314

Other Names
Ubiquitin carboxyl-terminal hydrolase BAP1, BRCA1-associated protein 1, Cerebral protein 6, BAP1, KIAA0272

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP2168a was selected from the N-term region of human BAP1 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

BAP1 Antibody (N-term) Blocking Peptide - Protein Information

Name BAP1 {ECO:0000303|PubMed:9528852, ECO:0000312|HGNC:HGNC:950}

Function
Deubiquitinating enzyme that plays a key role in chromatin by mediating deubiquitination of histone H2A and HCFC1 (PubMed:12485996, PubMed:18757409, PubMed:20436459, PubMed:25451922, PubMed:35051358). Catalytic component of the PR-DUB complex, a complex that specifically mediates deubiquitination of histone H2A monoubiquitinated at 'Lys-119' (H2AK119ub1) (PubMed:20436459, PubMed:25451922, PubMed:<a href="http://www.uniprot.org/citations/35051358"

target="_blank">35051358). Does not deubiquitinate monoubiquitinated histone H2B (PubMed:20436459). Acts as a regulator of cell growth by mediating deubiquitination of HCFC1 N-terminal and C-terminal chains, with some specificity toward 'Lys-48'-linked polyubiquitin chains compared to 'Lys-63'-linked polyubiquitin chains (PubMed:19188440, PubMed:19815555). Deubiquitination of HCFC1 does not lead to increase stability of HCFC1 (PubMed:19188440, PubMed:19815555). Interferes with the BRCA1 and BARD1 heterodimer activity by inhibiting their ability to mediate ubiquitination and autoubiquitination (PubMed:19117993). It however does not mediate deubiquitination of BRCA1 and BARD1 (PubMed:19117993). Able to mediate autodeubiquitination via intramolecular interactions to couteract monoubiquitination at the nuclear localization signal (NLS), thereby protecting it from cytoplasmic sequestration (PubMed:24703950). Acts as a tumor suppressor (PubMed:9528852).

Cellular Location
Cytoplasm. Nucleus. Note=Mainly nuclear. Binds to chromatin. Localizes to the cytoplasm when monoubiquitinated by the E2/E3 hybrid ubiquitin-protein ligase UBE2O (PubMed:24703950).

Tissue Location
Highly expressed in testis, placenta and ovary. Expressed in breast.

BAP1 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

BAP1 Antibody (N-term) Blocking Peptide - Images

BAP1 Antibody (N-term) Blocking Peptide - Background

'BRCA1-associated protein-1,' or BAP1 interacts with the RING finger domain of BRCA1. The N-terminal 240 amino acids of the predicted 729-amino acid human protein show homology to ubiquitin C-terminal hydrolases (UCHs), thiol proteases that catalyze proteolytic processing of ubiquitin. In addition, BAP1 contains an acidic region, a highly charged C-terminal region, and 2 putative nuclear localization signals.. BAP1 and BRCA1 associate in vivo and have overlapping subnuclear localization patterns.1 BAP1 enhances BRCA1-mediated inhibition of breast cancer cell growth. Northern blot analysis indicates that BAP1 is expressed as a 4-kb mRNA in all human tissues tested, with A 4.8-kb transcript expressed exclusively in testis. Northern blot analysis and in situ hybridization reveal that BAP1 and BRCA1 are coexpressed during murine breast development and remodeling. The BAP1 gene has been mapped to 3p21.3, a region of loss of heterozygosity for breast cancer as well as frequently deleted in lung carcinomas.1 Intragenic homozygous rearrangements and deletions of BAP1 appear in lung carcinoma cell lines. It has been postulated that BAP1 is a tumor suppressor gene that functions in the BRCA1 growth control pathway.1