

BAP1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2168b

Specification

BAP1 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E <u>Q92560</u> <u>D3ZHS6, Q99PU7, A1L2G3, Q5F3N6, A2VDM8</u> Human Bovine, Chicken, Zebrafish, Mouse, Rat Rabbit Polyclonal Rabbit IgG 80362 699-729

BAP1 Antibody (C-term) - Additional Information

Gene ID 8314

Other Names

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

Target/Specificity

This BAP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 699-729 amino acids from the C-terminal region of human BAP1.

Dilution WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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

BAP1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

BAP1 Antibody (C-term) - 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 deubiguitination 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 deubiguitination of histone H2A monoubiguitinated at 'Lys-119' (H2AK119ub1) (PubMed:20436459, PubMed:25451922, PubMed:35051358). Does not deubiquitinate monoubiquitinated histone H2B (PubMed: 20436459). Acts as a regulator of cell growth by mediating deubiguitination of HCFC1 N-terminal and C-terminal chains, with some specificity toward 'Lys-48'-linked polyubiguitin chains compared to 'Lys-63'-linked polyubiguitin 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 autoubiguitination (PubMed: 19117993). It however does not mediate deubiguitination of BRCA1 and BARD1 (PubMed: 19117993). Able to mediate autodeubiquitination via intramolecular interactions to couteract monoubiguitination at the nuclear localization signal (NLS), thereby protecting it from cytoplasmic sequestration (PubMed:<u>24703950</u>). 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 (C-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>

BAP1 Antibody (C-term) - Images



The anti-BAP1 Pab (Cat. #AP2168b) is used in Western blot to detect BAP1 in SK-BR-3 cell lysate. BAP1 Antibody (C-term) - 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