

BAP1 Rabbit mAb

Catalog # AP76400

Product Information

ApplicationWBPrimary AccessionQ92560ReactivityHumanHostRabbit

Clonality Monoclonal Antibody

Calculated MW 80362

Additional Information

Gene ID 8314

Other Names BAP1

Dilution WB~~1/500-1/1000

Format Liquid

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: <u>35051358</u>). Catalytic component of the polycomb repressive deubiquitinase (PR-DUB) complex, a complex that specifically mediates

deubiquitination of histone H2A monoubiquitinated at 'Lys-120'

(H2AK119ub1) (PubMed:<u>20436459</u>, PubMed:<u>25451922</u>, PubMed:<u>30664650</u>,

PubMed:35051358). Does not deubiquitinate monoubiquitinated histone H2B (PubMed:30436459). The PR-DLIB complex is an

(PubMed:<u>20436459</u>, PubMed:<u>30664650</u>). The PR-DUB complex is an epigenetic regulator of gene expression and acts as a transcriptional

coactivator, affecting genes involved in development, cell communication,

signaling, cell proliferation and cell viability (PubMed: <u>20805357</u>, PubMed: <u>30664650</u>, PubMed: <u>36180891</u>). Antagonizes PRC1 mediated

H2AK119ub1 monoubiquitination (PubMed:<u>30664650</u>). As part of the PR-DUB complex, associates with chromatin enriched in histone marks H3K4me1,

H3K4me3, and H3K27Ac, but not in H3K27me3 (PubMed:<u>36180891</u>). Recruited to specific gene-regulatory regions by YY1 (PubMed:<u>20805357</u>). 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 counteract monoubiquitination at the nuclear localization signal (NLS), thereby protecting it from cytoplasmic sequestration (PubMed:24703950). Negatively regulates epithelial-mesenchymal transition (EMT) of trophoblast stem cells during placental development by regulating genes involved in epithelial cell integrity, cell adhesion and cytoskeletal organization (PubMed:34170818).

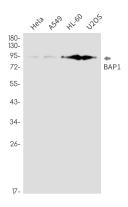
Cellular Location

Cytoplasm. Nucleus. Chromosome. Note=Mainly nuclear (PubMed:24703950, PubMed:30664650). Binds to chromatin (PubMed:30664650). Localizes to the cytoplasm when monoubiquitinated by the E2/E3 hybrid ubiquitin- protein ligase UBE2O (PubMed:24703950). Recruitment to chromatin is dependent on ASXL1/2/3 and recruitment to specific genes on FOXK1/2 (By similarity). Nuclear localization is redundantly mediated by the importin and transportin systems; TNPO1/transportin-1 is the major mediator of nuclear localization (PubMed:35446349) {ECO:0000250 | UniProtKB:Q99PU7, ECO:0000269 | PubMed:24703950, ECO:0000269 | PubMed:30664650, ECO:0000269 | PubMed:35446349}

Tissue Location

Highly expressed in testis, placenta and ovary (PubMed:9528852). Expressed in breast (PubMed:9528852). levels in the placenta increase over the course of pregnancy (PubMed:34170818)

Images



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