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BAP1 Rabbit mAb

Catalog # AP76400

Product Information

Application	WB
Primary Accession	Q92560
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	80362

Additional Information

Gene ID	8314
Other Names	BAP1
Dilution	WB~~1/500-1/1000
Format	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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 polycomb repressive deubiquitinase (PR-DUB) complex, a complex that specifically mediates deubiquitination of histone H2A monoubiquitinated at 'Lys-120' (H2AK119ub1) (PubMed:20436459, PubMed:25451922, PubMed:30664650, PubMed:35051358). Does not deubiquitinate monoubiquitinated histone H2B (PubMed:20436459, PubMed:30664650). 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:20805357, PubMed:30664650, PubMed:36180891). Antagonizes PRC1 mediated H2AK119ub1 monoubiquitination (PubMed:30664650). As part of the PR-DUB complex, associates with chromatin enriched in histone marks H3K4me1, H3K4me3, and H3K27Ac, but not in H3K27me3 (PubMed:36180891). Recruited to specific gene-regulatory regions by YY1 (PubMed:20805357). 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).

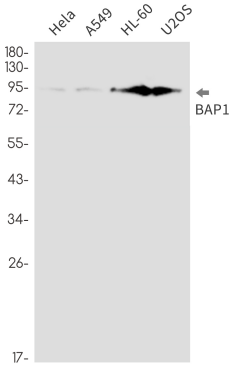
Cellular Location

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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