

BRAT1 Rabbit mAb

Catalog # AP75166

Product Information

Primary Accession	Q6PJG6
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	88119

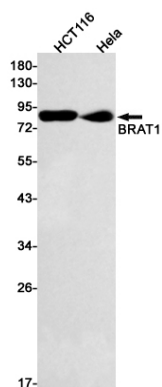
Additional Information

Gene ID	221927
Other Names	BRAT1
Format	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	BRAT1 {ECO:0000303 PubMed:25657994, ECO:0000312 HGNC:HGNC:21701}
Function	Component of a multiprotein complex required for the assembly of the RNA endonuclease module of the integrator complex (PubMed:39032489, PubMed:39032490). Associates with INTS9 and INTS11 in the cytoplasm and blocks the active site of INTS11 to inhibit the endonuclease activity of INTS11 before formation of the full integrator complex (PubMed:39032489, PubMed:39032490). Following dissociation of WDR73 of the complex, BRAT1 facilitates the nuclear import of the INTS9-INTS11 heterodimer (PubMed:39032489). In the nucleus, INTS4 is integrated to the INTS9-INTS11 heterodimer and BRAT1 is released from the mature RNA endonuclease module by inositol hexakisphosphate (InsP6) (PubMed:39032489). BRAT1 is also involved in DNA damage response; activates kinases ATM, SMC1A and PRKDC by modulating their phosphorylation status following ionizing radiation (IR) stress (PubMed:16452482, PubMed:22977523). Plays a role in regulating mitochondrial function and cell proliferation (PubMed:25070371). Required for protein stability of MTOR and MTOR-related proteins, and cell cycle progress by growth factors (PubMed:25657994).
Cellular Location	Nucleus. Cytoplasm Note=Present at double strand breaks (DSBs) following ionizing radiation treatment. The ubiquitinated form localizes in the nucleus in a NDFIP1- dependent manner.
Tissue Location	Ubiquitously expressed.

Images



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