10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

BRAT1 Rabbit mAb

Catalog # AP75165

Product Information

Application	WB, IP, ICC
Primary Accession	Q6PJG6
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	88119

Additional Information

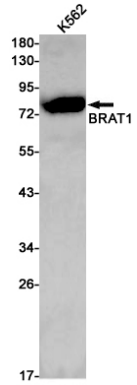
Gene ID	221927
Other Names	BRAT1
Dilution	WB~~1/500-1/1000 IP~~N/A ICC~~N/A
Format	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

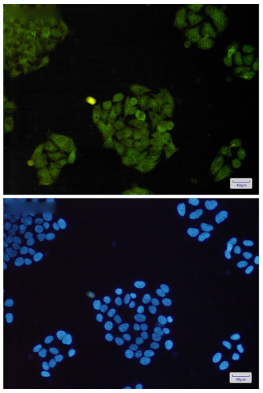
Protein Information

Name	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





Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.