

BRAT1 Antibody
Rabbit mAb
Catalog # AP92990**Specification****BRAT1 Antibody - Product Information**

Application **WB, FC, ICC, IP**
Primary Accession **[Q6PJG6](#)**
Clonality **Monoclonal**
Other Names
BAAT1; brat1; C7orf27; RMFSL;

Isotype **Rabbit IgG**
Host **Rabbit**
Calculated MW **88119 Da**

BRAT1 Antibody - Additional Information

Dilution **WB~~1:1000**
FC~~1:10~50
ICC~~N/A
IP~~N/A
Purification **Affinity-chromatography**
Immunogen **A synthesized peptide derived from human BRAT1**
Description **Required for activation of ATM following ionizing radiation. May act by regulating dephosphorylation of ATM.**
Storage Condition and Buffer **Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.**

BRAT1 Antibody - 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

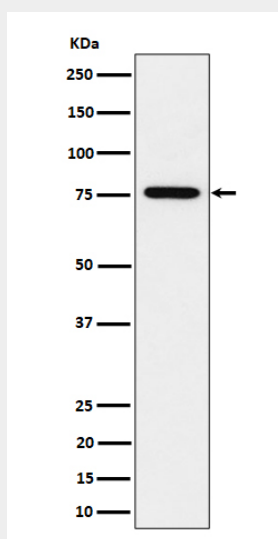
Ubiquitously expressed.

BRAT1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

BRAT1 Antibody - Images



Western blot analysis of BRAT1 expression in HeLa cell lysate.