abcam

ab250526

Anti-BRAT1 antibody [EPR13753] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR13753
Purification technique	Affinity purification

Reactivity data

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information BRAT1

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).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab250526 is the carrier-free version of ab181855.

Patented technology

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

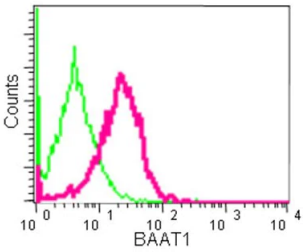
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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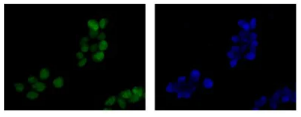
4 product images



Flow Cytometry (Intracellular) - Anti-BRAT1 antibody [EPR13753] - BSA and Azide free (ab250526)

BRAT1 Flow Cytometry (Intracellular) staining using rabbit Anti-BRAT1 antibody

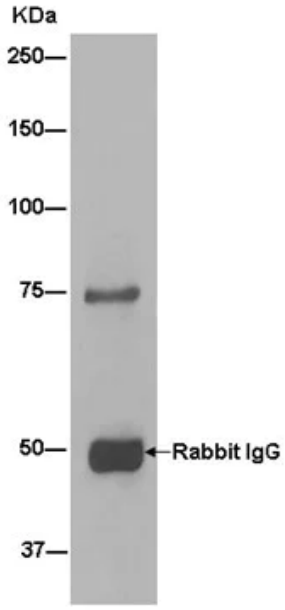
This data was developed using ab181855, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of HeLa cells (paraformaldehyde-fixed, 2%) labeling BRAT1 with ab181855 at 1/10 dilution (red) or a rabbit IgG (negative) (green), followed by secondary Goat anti rabbit IgG (FITC) at 1/150 dilution. Isotype control Rabbit IgG.



Immunocytochemistry/ Immunofluorescence - Anti-BRAT1 antibody [EPR13753] - BSA and Azide free (ab250526)

BRAT1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-BRAT1 antibody

This data was developed using ab181855, the same antibody clone in a different buffer formulation.
Immunofluorescent analysis of 4% paraformaldehyde fixed 293 cells labeling BRAT1 with ab181855 at 1/250 dilution. Secondary antibody Goat anti rabbit IgG(Alexa Fluor®488) at 1/200 dilution, Conterstained with Dapi blue.



Immunoprecipitation - Anti-BRAT1 antibody [EPR13753] - BSA and Azide free (ab250526)

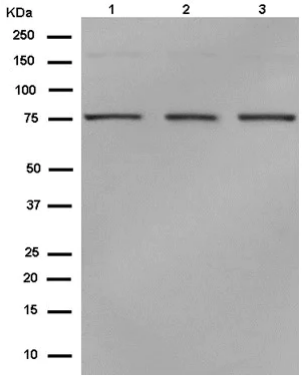
This data was developed using ab181855, the same antibody clone in a different buffer formulation.
Western blot analysis of BRAT1 in immunoprecipitation pellets from Human Jurkat lysate. ab181855 used at 1/30 dilution. Secondary antibody Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000.

Blocking and dilution buffer: 5% NFDM/TBST.

All lanes:
Immunoprecipitation - Anti-BRAT1 antibody [EPR13753] - C-terminal (ab181855)

Predicted band size: 88 kDa

Observed band size: 75 kDa



Western blot - Anti-BRAT1 antibody [EPR13753] - BSA and Azide free (ab250526)

This data was developed using ab181855, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-BRAT1 antibody [EPR13753] - C-terminal (ab181855) at 1/10000 dilution

Lane 1:
HeLa cell lysate at 20 µg

Lane 2:
293 cell lysate at 20 µg

Lane 3:
Jurkat cell lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 88 kDa

Observed band size: 75 kDa

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