abcam

Product datasheet

Anti-RCC1 antibody [EPR5857] ab109379

Recombinant RabMAb

2 References 4 Images

Overview

Product name	Anti-RCC1 antibody [EPR5857]
Description	Rabbit monoclonal [EPR5857] to RCC1
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt, WB, IHC-P
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide within Human RCC1 aa 1-100. The exact sequence is proprietary.
Positive control	WB: A431, HeLa, Jurkat and 293T cell lysates. IHC-P: Human bladder carcinoma tissue. Flow Cyt: HeLa cells.

General notes

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 production

For more information see here.

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

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR5857
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab109379** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		1/2000.
WB		1/1000 - 1/10000. Predicted molecular weight: 45 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. Heat up to 98 degrees C, below boiling, and then let cool for 10-20 min.

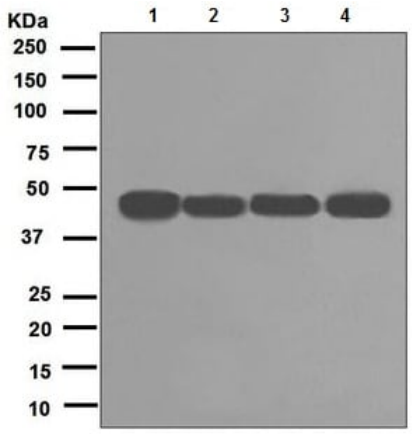
Target

Function	Guanine-nucleotide releasing factor that promotes the exchange of Ran-bound GDP by GTP. Involved in the regulation of onset of chromosome condensation in the S phase. Binds both to the nucleosomes and double-stranded DNA. RCC1-Ran complex (together with other proteins) acts as a component of a signal transmission pathway that detects unreplicated DNA. Plays a key role in nucleo-cytoplasmic transport, mitosis and nuclear-envelope assembly.
Sequence similarities	Contains 7 RCC1 repeats.
Post-translational modifications	N-terminal methylation by METTL11A/NTM1 is required for binding double-stranded DNA and stable chromatin association. Di-and trimethylation produce a permanent positive charge on the

amino group, which facilitate electrostatic binding to the phosphate groups on DNA, while inhibiting histone-binding. Methylated tail helps retain RCC1 on chromosomes during nucleotide exchange on Ran.

Cellular localization Nucleus. Cytoplasm. Becomes dispersed throughout the cytoplasm during mitosis.

Images



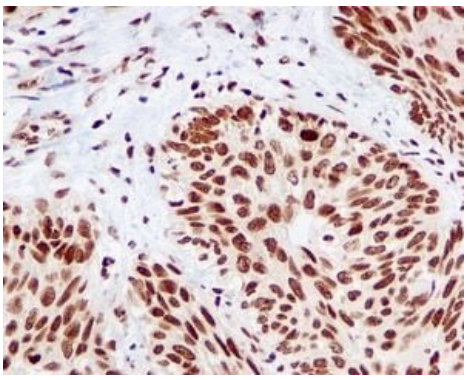
Western blot - Anti-RCC1 antibody [EPR5857] (ab109379)

All lanes : Anti-RCC1 antibody [EPR5857] (ab109379) at 1/1000 dilution

Lane 1 : A431 cell lysate
Lane 2 : HeLa cell lysate
Lane 3 : Jurkat cell lysate
Lane 4 : 293T cell lysate

Lysates/proteins at 10 µg per lane.

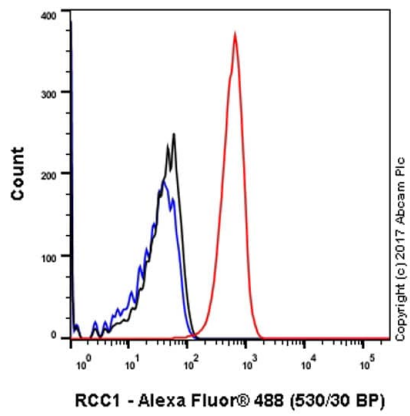
Predicted band size: 45 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RCC1 antibody [EPR5857] (ab109379)

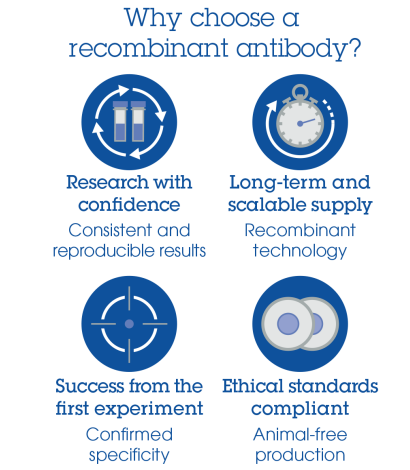
ab109379, at a 1/100 dilution, staining RCC1 in paraffin-embedded Human bladder carcinoma tissue

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Flow Cytometry - Anti-RCC1 antibody [EPR5857] (ab109379)

Flow cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling RCC1 (red) with ab109379 at a 1/2000 dilution. Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. A goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) was used as the secondary antibody at a 1/2000 dilution. Black - Rabbit monoclonal IgG (ab172730). Blue (unlabeled control) - Cells without incubation with primary and secondary antibodies.



Anti-RCC1 antibody [EPR5857] (ab109379)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors