

Product datasheet

Anti-RCC1 antibody [EPR5859(2)] ab181155

Recombinant RabMAb

6 Images

Overview

Product name	Anti-RCC1 antibody [EPR5859(2)]
Description	Rabbit monoclonal [EPR5859(2)] to RCC1
Host species	Rabbit
Specificity	ab181155 recognizes total RCC1 (phospho RCC1 and non-phospho RCC1), although the immunogen is phospho peptide.
Tested applications	Suitable for: WB, IHC-P, ICC/IF, IP
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	HeLa, A431, Jurkat and 293T lysates; Human tonsil and pancreas tissues; A431 cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

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 long term. Avoid freeze / thaw cycle.
Storage buffer	<p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS</p>
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR5859(2)
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab181155 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
WB		1/1000 - 1/10000. Detects a band of approximately 48 kDa (predicted molecular weight: 45 kDa).
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/100 - 1/250.
IP		1/30 - 1/70.

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.

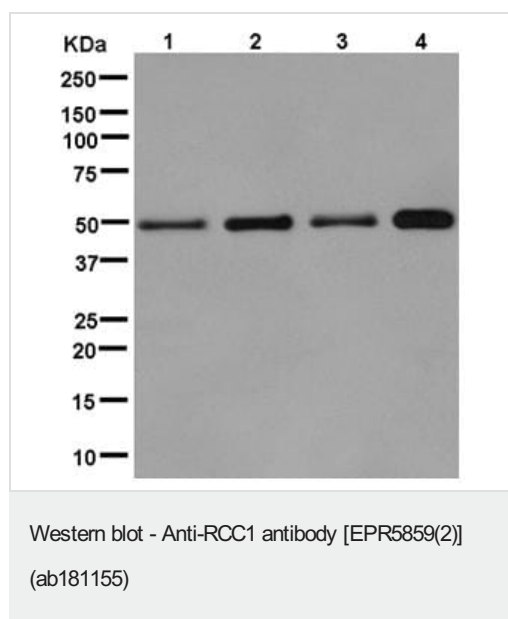
Post-translational modifications

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



All lanes : Anti-RCC1 antibody [EPR5859(2)] (ab181155) at 1/10000 dilution

Lane 1 : HeLa cell lysate

Lane 2 : A431 cell lysate

Lane 3 : Jurkat cell lysate

Lane 4 : 293T cell lysate

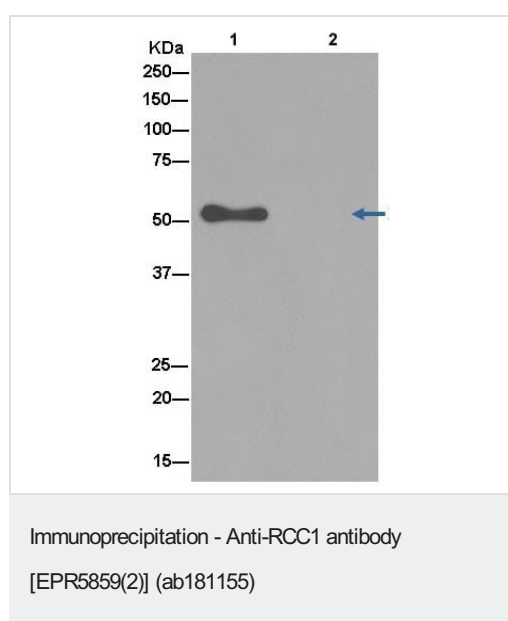
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat anti-rabbit IgG, (H+L), peroxidase conjugated at 1/1000 dilution

Predicted band size: 45 kDa

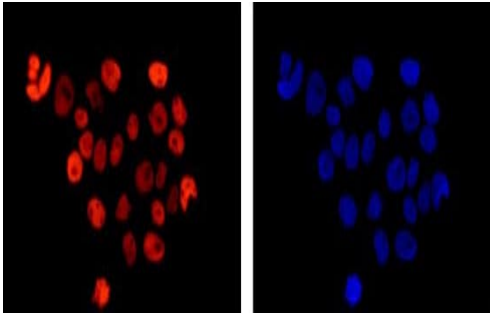
Observed band size: 48 kDa



Western Blot analysis of RCC1 in HeLa cell lysate

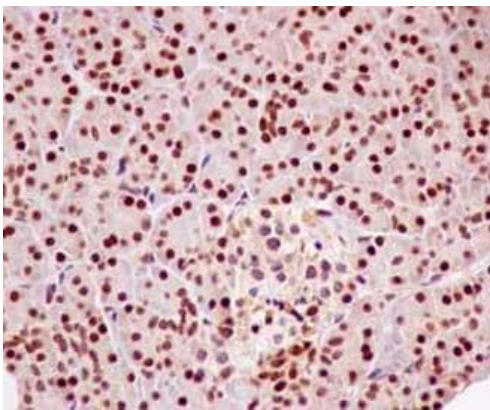
immunoprecipitated with ab181155 at 1/50 dilution (Lane 1). Lane 2: Negative control.

Secondary: Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1500 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-RCC1 antibody [EPR5859(2)] (ab181155)

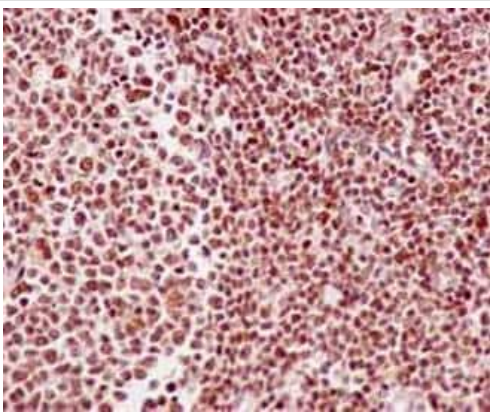
Immunofluorescent analysis of 4% paraformaldehyde-fixed A431 cells labeling RCC1 with ab181155 at 1/250 dilution followed by Goat anti rabbit IgG (Alexa Fluor® 555) secondary antibody at 1/200 diution. Counter stained with Dapi (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RCC1 antibody [EPR5859(2)] (ab181155)

Immunohistochemical analysis of paraffin-embedded Human pancreas tissue labeling RCC1 with ab181155 at 1/100 dilution followed by prediluted HRP Polymer for Rabbit IgG. Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RCC1 antibody [EPR5859(2)] (ab181155)

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labeling RCC1 with ab181155 at 1/100 dilution followed by prediluted HRP Polymer for Rabbit IgG. Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-RCC1 antibody [EPR5859(2)] (ab181155)

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

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