

Product datasheet

Anti-RIP antibody [EPR4689-100] ab178420

KO VALIDATED Recombinant RabMAb

3 Images

Overview

Product name	Anti-RIP antibody [EPR4689-100]
Description	Rabbit monoclonal [EPR4689-100] to RIP
Host species	Rabbit
Tested applications	Suitable for: WB, Flow Cyt Unsuitable for: ICC, IHC-P or IP
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment within Human RIP. The exact sequence is proprietary. Database link: Q13546
Positive control	HeLa cells and cell lysates; Raji cell lysates.
General notes	Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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](#).

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	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol, 0.05% BSA, 50% Tissue culture supernatant

Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR4689-100
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab178420** 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. Predicted molecular weight: 75 kDa.
Flow Cyt		1/10 - 1/100. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Application notes Is unsuitable for ICC, IHC-P or IP.

Target

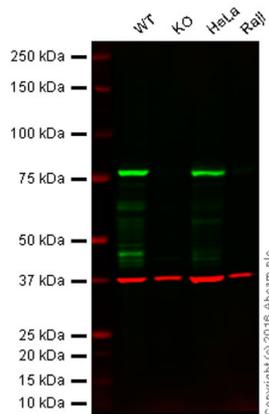
Function Essential adapter molecule for the activation of NF-kappa-B. Following different upstream signals (binding of inflammatory cytokines, stimulation of pathogen recognition receptors, or DNA damage), particular RIPK1-containing complexes are formed, initiating a limited number of cellular responses. Upon TNFA stimulation RIPK1 is recruited to a TRADD-TRAF complex initiated by TNFR1 trimerization. There, it is ubiquitinated via 'Lys-63'-link chains, inducing its association with the IKK complex, and its activation through NEMO binding of polyubiquitin chains.

Sequence similarities Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family.
Contains 1 death domain.
Contains 1 protein kinase domain.

Post-translational modifications Proteolytically cleaved by caspase-8 during TNF-induced apoptosis. Cleavage abolishes NF-kappa-B activation and enhances pro-apoptotic signaling through the TRADD-FADD interaction. Autophosphorylated on serine and threonine residues.
Ubiquitinated by 'Lys-11-', 'Lys-48-', 'Lys-63'- and linear-linked type ubiquitin. Polyubiquitination with 'Lys-63'-linked chains by TRAF2 induces association with the IKK complex. Deubiquitination of 'Lys-63'-linked chains and polyubiquitination with 'Lys-48'-linked chains by TNFAIP3 leads to RIPK1 proteasomal degradation and consequently to the termination of the TNF- or Linear polyubiquitinated; the head-to-tail polyubiquitination is mediated by the LUBAC complex. LPS-mediated activation of NF-kappa-B. Also ubiquitinated with 'Lys-11'-linked chains.

Cellular localization Cytoplasm.

Images



Western blot - Anti-RIP antibody [EPR4689-100]
(ab178420)

Lane 1: Wild-type HAP1 cell lysate (20 µg)

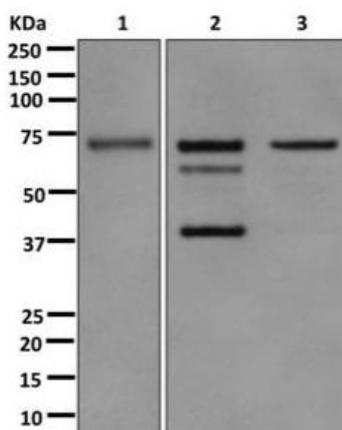
Lane 2: RIP knockout HAP1 cell lysate (20 µg)

Lane 3: HeLa cell lysate (20 µg)

Lane 4: Raji cell lysate (20 µg)

Lanes 1 to 4: Merged signal (red and green). Green - ab178420 observed at 78 kDa. Red - loading control, ab8245, observed at 37 kDa.

ab178420 was shown to react with RIP in wild-type HAP1 cells along with additional cross-reactive bands. No band was observed when RIP knockout samples were examined. Wild-type and RIP knockout samples were subjected to SDS-PAGE. ab178420 and ab8245 (loading control to GAPDH) were both diluted 1/1000 and 1/10,000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) ab216776 secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-RIP antibody [EPR4689-100]
(ab178420)

All lanes : Anti-RIP antibody [EPR4689-100] (ab178420) at 1/1000 dilution

Lane 1 : Raji cell lysate

Lane 2 : HeLa cell lysate with Staurosporine

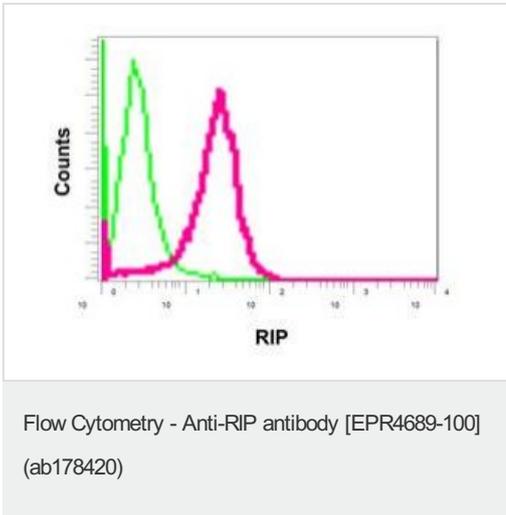
Lane 3 : HeLa cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 75 kDa



Flow Cytometric analysis of permeabilized HeLa cells labeling RIP with ab178420 at 1/10 dilution (red) compared with a rabbit IgG negative control (green).

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