

Product datasheet

Anti-RIP antibody [EPR4689] α b125072

KO VALIDATED

Recombinant

RabMAb[®]

[4 References](#) [6 Images](#)

Overview

| | |
|----------------------------|---|
| Product name | Anti-RIP antibody [EPR4689] |
| Description | Rabbit monoclonal [EPR4689] to RIP |
| Host species | Rabbit |
| Tested applications | Suitable for: WB Unsuitable for: IHC-P |
| Species reactivity | Reacts with: Human |
| Immunogen | Recombinant fragment corresponding to Human RIP aa 300-450 (internal sequence). |
| Positive control | WB: Raji, Jurkat, HeLa and 293T cell lysates |
| 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> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</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 | pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA |
| Purity | Protein A purified |
| Clonality | Monoclonal |

Clone number EPR4689

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab125072 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. |

Application notes Is unsuitable for IHC-P.

Target

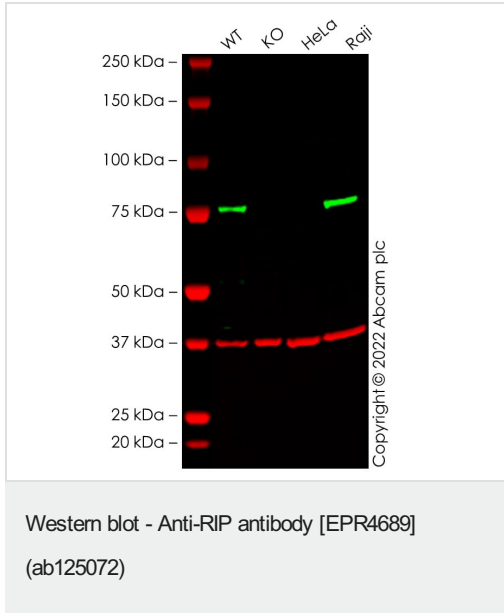
Function Essential adapter molecule for the activation of NF-kappa-B. Following different upstream signals (binding of inflammatory cytokines, stimulation of pathogen recognition receptors, or DNA damage), particular RIPK1-containing complexes are formed, initiating a limited number of cellular responses. 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



All lanes : Anti-RIP antibody [EPR4689] (ab125072) at 1/1000 dilution

Lane 1 : Wild-type THP-1 cell lysate

Lane 2 : RIPK1 knockout THP-1 cell lysate

Lane 3 : HeLa cell lysate

Lane 4 : Raji cell lysate

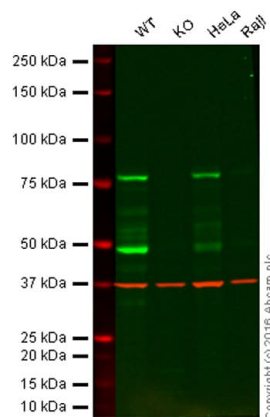
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 75 kDa

Observed band size: 76 kDa

False colour image of Western blot: Anti-RIP antibody [EPR4689] staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] ([ab8245](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab125072 was shown to bind specifically to RIP. A band was observed at 76 kDa in wild-type THP-1 cell lysates with no signal observed at this size in RIPK1 knockout cell line [ab276121](#) (knockout cell lysate [ab284210](#)). To generate this image, wild-type and RIPK1 knockout THP-1 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween[®] 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye[®] 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preabsorbed ([ab216776](#)) at 1/20000 dilution.



Western blot - Anti-RIP antibody [EPR4689]
(ab125072)

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

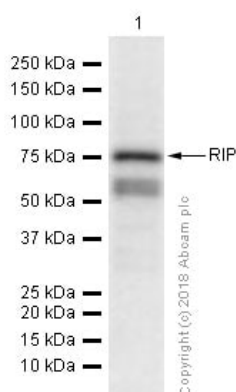
Lane 2: RIP knockout HAP1 cell lysate (20 µg)

Lane 3: HeLa cell lysate (20 µg)

Lane 4: Raji cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab125072 (unpurified) observed at 78 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab125072 was shown to specifically react with RIP in wild-type HAP1 cells. No band was observed when RIP knockout samples were examined. Wild-type and RIP knockout samples were subjected to SDS-PAGE. ab125072 at a dilution of 1/1000 and **ab8245** (loading control to GAPDH) at a dilution of 1/10,000 were incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-RIP antibody [EPR4689]
(ab125072)

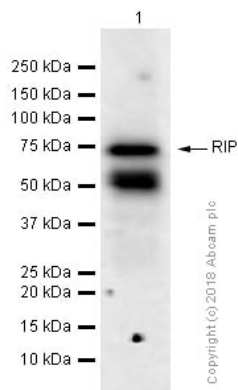
Anti-RIP antibody [EPR4689] (ab125072) at 1/5000 dilution (Purified) + Raji (Human Burkitt's lymphoma B lymphocyte) whole cell lysate at 15 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 75 kDa

Observed band size: 75 kDa



Western blot - Anti-RIP antibody [EPR4689]
(ab125072)

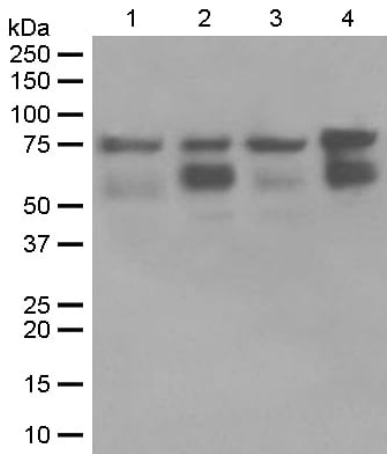
Anti-RIP antibody [EPR4689] (ab125072) at 1/1000 dilution
(Purified) + HeLa (Human cervix adenocarcinoma epithelial cell)
whole cell lysates at 15 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 75 kDa

Observed band size: 75 kDa



Western blot - Anti-RIP antibody [EPR4689]
(ab125072)

All lanes : Anti-RIP antibody [EPR4689] (ab125072) at 1/1000 dilution (unpurified)

Lane 1 : Raji cell lysate

Lane 2 : Jurkat cell lysate





Lane 3 : HeLa cell lysate

Lane 4 : 293T cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 75 kDa

Why choose a recombinant antibody?

| | |
|--|--|
|  <p>Research with confidence Consistent and reproducible results</p> |  <p>Long-term and scalable supply Recombinant technology</p> |
|  <p>Success from the first experiment Confirmed specificity</p> |  <p>Ethical standards compliant Animal-free production</p> |

Anti-RIP antibody [EPR4689] (ab125072)

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