abcam

Product datasheet

Anti-TRAF2 antibody [EPR7064] ab167163

KO VALIDATED Recombinant RabMAb

1 References 6 Images

Overview

Product name	Anti-TRAF2 antibody [EPR7064]
Description	Rabbit monoclonal [EPR7064] to TRAF2
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC-P, ICC/IF
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant fragment corresponding to Human TRAF2.
Positive control	WB: HEK-293T. Molt-4, 293T, Raji and HeLa whole cell lysate (**ab150035**). IHC-P: Human kidney tissue ICC: 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**. Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Tissue culture supernatant

Clonality	Monoclonal
Clone number	EPR7064
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab167163 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: 55 kDa.
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/100 - 1/250.

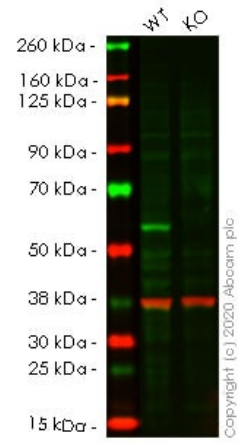
Target

Function	Regulates activation of NF-kappa-B and JNK and plays a central role in the regulation of cell survival and apoptosis. Required for normal antibody isotype switching from IgM to IgG. Has E3 ubiquitin-protein ligase activity and promotes 'Lys-63'-linked ubiquitination of target proteins, such as BIRC3, RIPK1 and TICAM1. Is an essential constituent of several E3 ubiquitin-protein ligase complexes, where it promotes the ubiquitination of target proteins by bringing them into contact with other E3 ubiquitin ligases. Regulates BIRC2 and BIRC3 protein levels by inhibiting their autoubiquitination and subsequent degradation; this does not depend on the TRAF2 RING-type zinc finger domain.
Pathway	Protein modification; protein ubiquitination.
Sequence similarities	Belongs to the TNF receptor-associated factor family. A subfamily. Contains 1 MATH domain. Contains 1 RING-type zinc finger. Contains 2 TRAF-type zinc fingers.
Domain	The coiled coil domain mediates homo- and hetero-oligomerization. The MATH/TRAF domain binds to receptor cytoplasmic domains. The RING-type zinc finger domain is essential for E3 ubiquitin-protein ligase activity. It is not essential for the stabilization of BIRC2, or for the ubiquitination of RIPK1 in response to TNFR1 signaling.
Post-translational modifications	Phosphorylated at several serine residues within the first 128 amino acid residues. Phosphorylated at Thr-117 in response to signaling via TNF and TNFRSF1A. Phosphorylation at Thr-117 is required for 'Lys-63'-linked polyubiquitination, but not for 'Lys-48'-linked polyubiquitination. Phosphorylation at Thr-117 is important for interaction with IKKA and IKKB, activation of IKK and subsequent activation of NF-kappa-B. Undergoes both 'Lys-48'-linked and 'Lys-63'-linked polyubiquitination. Polyubiquitinated via 'Lys-63'-linked ubiquitin in response to TNF signaling; this requires prior phosphorylation at Thr-117. 'Lys-63'-linked polyubiquitination promotes TRAF2-mediated activation of NF-kappa-B. Can be polyubiquitinated at several Lys residues via 'Lys-48'-linked ubiquitin chains in response to TNF

signaling, leading to proteasomal degradation. Autoubiquitinated, leading to its subsequent proteasomal degradation. Polyubiquitinated by BIRC2 and SIAH2, leading to its subsequent proteasomal degradation. Deubiquitinated by CYLD, a protease that specifically cleaves 'Lys-63'-linked polyubiquitin chains.

Cellular localization Cytoplasm.

Images



Western blot - Anti-TRAF2 antibody [EPR7064] (ab167163)

All lanes : Anti-TRAF2 antibody [EPR7064] (ab167163) at 1/1000 dilution

Lane 1 : Wild-type HEK-293T cell lysate
Lane 2 : TRAF2 knockout HEK-293T cell lysate

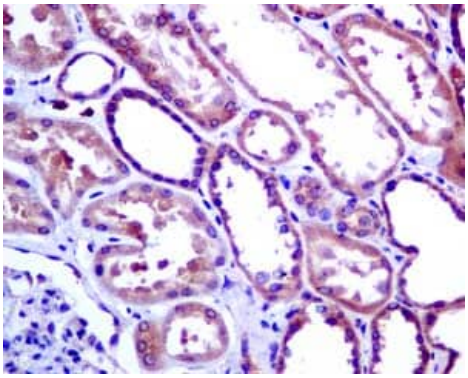
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 55 kDa
Observed band size: 55 kDa

Lanes 1- 2: Merged signal (red and green). Green - ab167163 observed at 55 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) observed at 37 kDa.

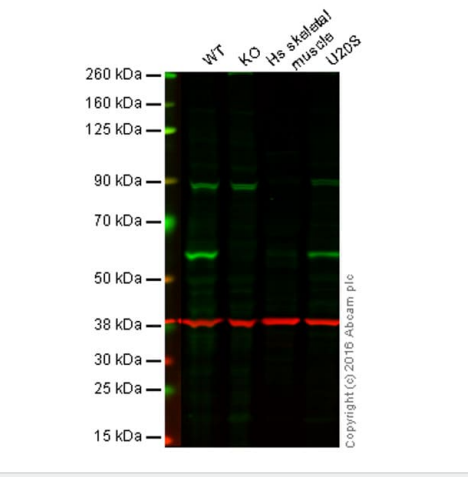
ab167163 was shown to react with TRAF2 in wild-type HEK-293T cells in western blot. Loss of signal was observed when knockout cell line **ab266060** (knockout cell lysate **ab257759**) was used. Wild-type HEK-293T and TRAF2 knockout HEK-293T cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab167163 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. 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 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TRAF2 antibody [EPR7064] (ab167163)

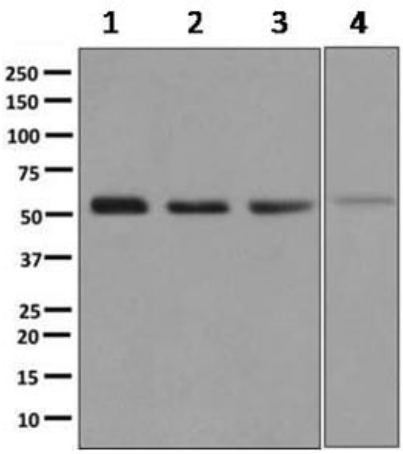
Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling TRAF2 with ab167163 at 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-TRAF2 antibody [EPR7064] (ab167163)

Lane 1: Wild-type HAP1 cell lysate (20 µg)
Lane 2: TRAF2 knockout HAP1 cell lysate (20 µg)
Lane 3: Human skeletal muscle tissue lysate (20 µg)
Lane 4: U20S cell lysate (20 µg)
Lanes 1 and 2: Merged signal (red and green). Green - ab167163 observed at 58 kDa. Red - loading control, **ab8245**, observed at 37 kDa.
ab167163 was shown to recognize TRAF2 when TRAF2 knockout samples were used, along with additional cross-reactive bands. Wild-type and TRAF2 knockout samples were subjected to SDS-PAGE. ab167163 and **ab8245** (loading control to GAPDH) were diluted 1/1000 and 1/2000 respectively and 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 1/10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-TRAF2 antibody [EPR7064] (ab167163)

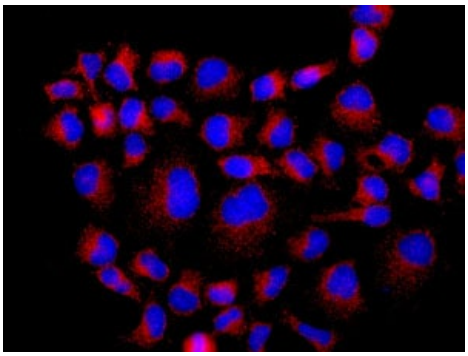
All lanes : Anti-TRAF2 antibody [EPR7064] (ab167163) at 1/1000 dilution

Lane 1 : Molt-4 cell lysate
Lane 2 : 293T (Human embryonic kidney epithelial cell) cell lysate
Lane 3 : Raji cell lysate
Lane 4 : HeLa cell lysate

Lysates/proteins at 10 µg per lane.

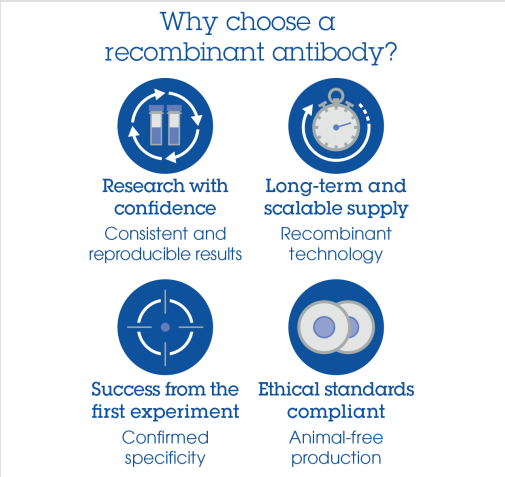
Secondary
All lanes : HRP labeled goat anti-rabbit at 1/2000 dilution

Predicted band size: 55 kDa



Immunocytochemistry/ Immunofluorescence - Anti-TRAF2 antibody [EPR7064] (ab167163)

Immunofluorescent analysis of HeLa cells labeling TRAF2 with ab167163 at 1/100 dilution.



Anti-TRAF2 antibody [EPR7064] (ab167163)

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