abcam

Product datasheet

Anti-E3 ubiquitin-protein ligase MUL1 antibody [EPR20241] ab209263

Recombinant RobMAb

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Overview

Product name Anti-E3 ubiquitin-protein ligase MUL1 antibody [EPR20241]

Description Rabbit monoclonal [EPR20241] to E3 ubiquitin-protein ligase MUL1

Host species Rabbit

Tested applications Suitable for: IP, WB

Unsuitable for: ICC

Species reactivity Reacts with: Human

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: HEK-293, HeLa, PC-3 and A431 whole cell lysates; Human fetal heart lysate. IP: HeLa whole

cell lysate.

General notesThis 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: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal

1

Clone number EPR20241

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab209263 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
IP		1/30.
WB	*** <u>*</u>	1/1000. Detects a band of approximately 39 kDa (predicted molecular weight: 39 kDa).

Application notes Is unsuitable for ICC.

Target

Function Exhibits weak E3 ubiquitin-protein ligase activity, but preferentially acts as a SUMO E3 ligase at

physiological concentrations. Plays a role in the control of mitochondrial morphology. Promotes mitochondrial fragmentation and influences mitochondrial localization. Inhibits cell growth. When overexpressed, activates JNK through MAP3K7/TAK1 and induces caspase-dependent apoptosis. E3 ubiquitin ligases accept ubiquitin from an E2 ubiquitin-conjugating enzyme in the

form of a thioester and then directly transfer the ubiquitin to targeted substrates.

Tissue specificity Widely expressed with highest levels in the heart, skeletal muscle, placenta, kidney and liver.

Barely detectable in colon and thymus.

Pathway Protein modification; protein ubiquitination.

Protein modification; protein sumoylation.

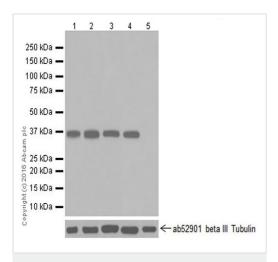
Sequence similarities Contains 1 RING-type zinc finger.

Domain The zinc finger domain is required for E3 ligase activity.

Cellular localization Mitochondrion outer membrane. Peroxisome. Transported in mitochondrion-derived vesicles from

the mitochondrion to the peroxisome.

Images



Western blot - Anti-E3 ubiquitin-protein ligase MUL1 antibody [EPR20241] (ab209263)

All lanes : Anti-E3 ubiquitin-protein ligase MUL1 antibody [EPR20241] (ab209263) at 1/1000 dilution

Lane 1 : HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate

Lane 2: HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 3: PC-3 (Human prostate adenocarcinoma cell line) whole cell lysate

Lane 4: Human fetal heart tissue lysate

Lane 5: Human thymus tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

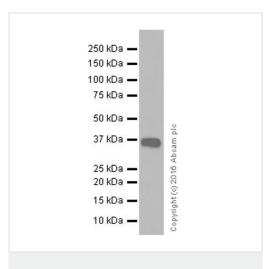
All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

Predicted band size: 39 kDa **Observed band size:** 39 kDa

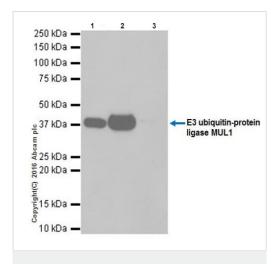
Exposure time: 15 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

Negative control: Human thymus (PMID: 18591963).



Western blot - Anti-E3 ubiquitin-protein ligase MUL1 antibody [EPR20241] (ab209263)



Immunoprecipitation - Anti-E3 ubiquitin-protein ligase MUL1 antibody [EPR20241] (ab209263)

Anti-E3 ubiquitin-protein ligase MUL1 antibody [EPR20241] (ab209263) at 1/1000 dilution + A431 (Human epidermoid carcinoma cell line) whole cell lysate at 20 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 39 kDa **Observed band size:** 39 kDa

Exposure time: 15 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

E3 ubiquitin-protein ligase MUL1 was immunoprecipitated from 0.35 mg of HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate with ab209263 at 1/30 dilution.

Western blot was performed from the immunoprecipitate using ab209263 at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>), was used for detection at 1/10000 dilution.

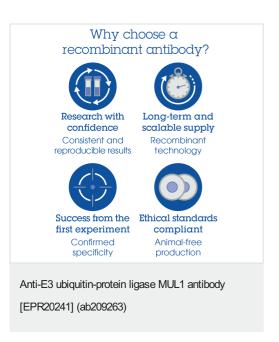
Lane 1: HeLa whole cell lysate, 10 µg (Input).

Lane 2: ab209263 IP in HeLa whole cell lysate.

Lane 3: Rabbit monoclonal $\lg G$ ($\underline{ab172730}$) instead of ab209263 in HeLa whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 3 minutes.



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

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