abcam

Product datasheet

Anti-RAB29 (phospho S72) antibody [MJF-R40-R3-H3] ab291075



2 Images

Overview

Product name Anti-RAB29 (phospho S72) antibody [MJF-R40-R3-H3]

Description Rabbit monoclonal [MJF-R40-R3-H3] to RAB29 (phospho S72)

Host species Rabbit

Tested applications Suitable for: WB

Species reactivity Reacts with: Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: Whole cell lysates of HEK-293T transfected with a human LRRK2[R1441G] expression

> vector and a human RAB29 expression vector containing a HA-tag. RAB29 expression vector contained either the single T71A mutation or both T71A and S72A mutations. Cells were either

treated or not treated with 200 µM MLi-2 for 1.5h. All variations were HA-tagged.

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**.

This antibody was developed with support from The Michael J. Fox Foundation.



Properties

Form

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 MJF-R40-R3-H3

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise quarantee covers the use of ab291075 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		1/500. Detects a band of approximately 25 kDa (predicted molecular weight: 23 kDa).

Function

Rab GTPase key regulator in vesicle trafficking. Essential for maintaining the integrity of the endosome-trans-Golgi network structure. Together with LRRK2, plays a role in the retrograde trafficking pathway for recycling proteins, such as mannose 6 phosphate receptor (M6PR), between lysosomes and the Golgi apparatus in a retromer-dependent manner. Regulates neuronal process morphology in the intact central nervous system (CNS). May play a role in the formation of typhoid toxin transport intermediates during Salmonella enterica serovar Typhi (S.Typhi) epithelial cell infection.

Tissue specificity

Ubiquitous.

Sequence similarities

Belongs to the small GTPase superfamily. Rab family.

Post-translational modifications

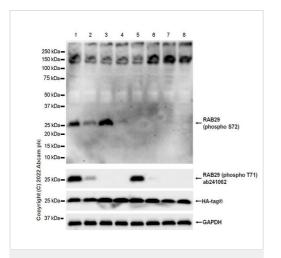
In case of Salmonella enterica serovar Typhimurium (S.Typhimurium) infection, is proteolytically cleaved between Gly-41 and Val-42 by the GtgE viral protease encoded on the Gifsy-2 lysogen bacteriophage, which therefore prevents the recruitment of RAB29 to S.Typhimurium-containing vacuoles. In contrast, no proteolytically cleavage is detected in S.Typhi-infected cells

(PubMed:22042847).

Cellular localization

Cell membrane. Cytoplasm. Cytoplasm, perinuclear region. Golgi apparatus. Golgi apparatus, trans-Golgi network. Vacuole. Cytoplasm, cytoskeleton. Colocalizes with LRRK2 along tubular structures emerging from Golgi apparatus (By similarity). Colocalizes with GM130 at the Golgi apparatus. Colocalizes with dynamic tubules emerging from and retracting to the Golgi apparatus. Colocalizes with TGN46 at the trans-Golgi network (TGN). In Salmonella enterica serovar Typhi (S.Typhi) infected epithelial cells, is recruited and colocalized with both S.Typhi-containing vacuoles and dynamic tubules as well as those emerging from the vacuole toward the cell periphery.

Images



Western blot - Anti-RAB29 (phospho S72) antibody [MJF-R40-R3-H3] (ab291075)

All lanes : Anti-RAB29 (phospho S72) antibody [MJF-R40-R3-H3] (ab291075) at 1/500 dilution

Lane 1: HEK-293T (human embryonic kidney epithelial cell) transfected with a human LRRK2[R1441G] expression vector and a human RAB29 expression vector containing an HA-tag, whole cell lysate

Lane 2 : HEK-293T transfected with a human LRRK2[R1441G] expression vector and a human RAB29 expression vector containing an HA-tag and treated with 200 μ M MLi-2 for 1.5h, whole cell lysate,

Lane 3: HEK-293T transfected with a human LRRK2[R1441G] expression vector and a human RAB29 (T71A mutation) expression vector containing an HA-tag, whole cell lysate.

Lane 4 : HEK-293T transfected with a human LRRK2[R1441G] expression vector and a human RAB29 (T71A mutation) expression vector containing an HA-tag and treated with 200 μ M MLi-2 for 1.5h, whole cell lysate

Lane 5: HEK-293T transfected with a human LRRK2[R1441G] expression vector and a human RAB29 (S72A mutation) expression vector containing an HA-tag, whole cell lysate

Lane 6 : HEK-293T transfected with a human LRRK2[R1441G] expression vector and a human RAB29 (S72A mutation) expression vector containing an HA-tag and treated with 200 μ M MLi-2 for 1.5h, whole cell lysate

Lane 7: HEK-293T transfected with a human LRRK2[R1441G] expression vector and a human RAB29 (T71A and S72A mutation) expression vector containing an HA-tag, whole cell lysate

Lane 8 : HEK-293T transfected with a human LRRK2[R1441G] expression vector and a human RAB29 (T71A and S72A mutation) expression vector containing an HA-tag and treated with 200 μ M MLi-2 for 1.5h, whole cell lysate

Lysates/proteins at 38 µg per lane.

Secondary

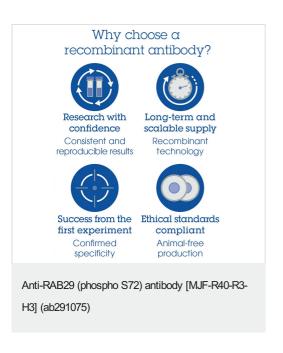
All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/10000 dilution

Predicted band size: 23 kDa **Observed band size:** 25 kDa

Exposure time: 3 minutes

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

All the lysates were kindly provided by Prof. Dario Alessi, University of Dundee.



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