

Product datasheet

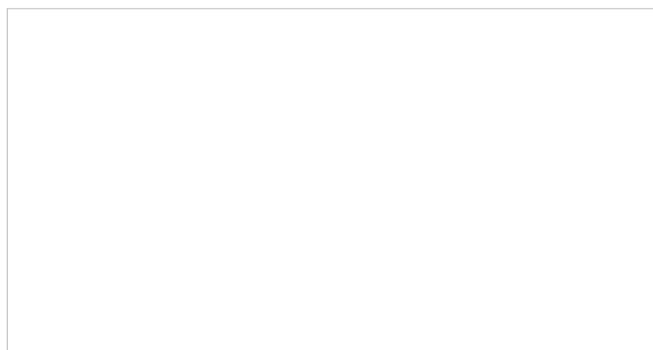
Anti-RAB10 (phospho T73) antibody [MJF-R21] - BSA and Azide free ab231707

KO VALIDATED Recombinant RabMAB

[2 References](#) [3 Images](#)

Overview

Product name	Anti-RAB10 (phospho T73) antibody [MJF-R21] - BSA and Azide free
Description	Rabbit monoclonal [MJF-R21] to RAB10 (phospho T73) - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: WB, Dot blot
Species reactivity	Reacts with: Mouse, Human, Recombinant fragment
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Wild-type MEF whole cell lysate; LRRK2 [R1441C] knock-in MEF whole cell lysate.
General notes	<p>ab231707 is the carrier-free version of ab230261.</p> <p>Please see PMID: 29127256. Lis P et al. Development of phospho-specific Rab protein antibodies to monitor in vivo activity of the LRRK2 Parkinson's disease kinase. <i>Biochem J</i> 475 :1-22 (2018).</p> <p>This antibody was developed with support from The Michael J. Fox Foundation.</p>



Our [carrier-free](#) antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our [conjugation kits](#) for antibody conjugates that are ready-to-use in as little as 20 minutes

with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	MJF-R21
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab231707 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		Use at an assay dependent concentration. Detects a band of approximately 23 kDa (predicted molecular weight: 23 kDa).
Dot blot		Use at an assay dependent concentration.

Target

Function The small GTPases Rab are key regulators of intracellular membrane trafficking, from the formation of transport vesicles to their fusion with membranes. Rabs cycle between an inactive GDP-bound form and an active GTP-bound form that is able to recruit to membranes different set of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion (By similarity). That Rab is mainly involved in the biosynthetic transport of proteins from the Golgi

to the plasma membrane. Regulates, for instance, SLC2A4/GLUT4 glucose transporter-enriched vesicles delivery to the plasma membrane. In parallel, it regulates the transport of TLR4, a toll-like receptor to the plasma membrane and therefore may be important for innate immune response. Plays also a specific role in asymmetric protein transport to the plasma membrane within the polarized neuron and epithelial cells. In neurons, it is involved in axonogenesis through regulation of vesicular membrane trafficking toward the axonal plasma membrane while in epithelial cells, it regulates transport from the Golgi to the basolateral membrane. Moreover, may play a role in the basolateral recycling pathway and in phagosome maturation. According to PubMed:23263280, may play a role in endoplasmic reticulum dynamics and morphology controlling tubulation along microtubules and tubules fusion.

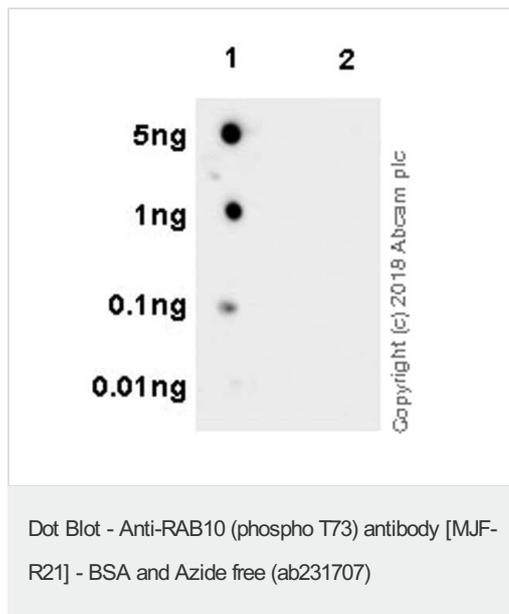
Sequence similarities

Belongs to the small GTPase superfamily. Rab family.

Cellular localization

Cytoplasmic vesicle membrane. Golgi apparatus membrane. Golgi apparatus, trans-Golgi network membrane. Endosome membrane. Recycling endosome membrane. Cytoplasmic vesicle, phagosome membrane. Cell projection, cilium. Endoplasmic reticulum membrane. Associates with SLC2A4/GLUT4 storage vesicles (PubMed:22908308). Localizes to the base of the cilium (PubMed:20576682). Transiently associates with phagosomes (By similarity). Localizes to the endoplasmic reticulum at domains of new tubule growth (PubMed:23263280).

Images



Dot blot analysis of Rab10 (phospho T73) labeled with [ab230261](#) at 1/1000 dilution.

Lane 1: Rab10 (phospho T73) peptide;

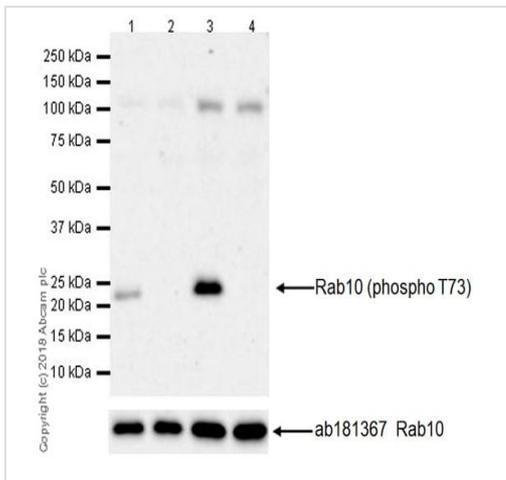
Lane 2: Rab10 non-phospho peptide.

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100,000 dilution was used as secondary antibody.

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: 32 seconds.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab230261](#)).



Western blot - Anti-RAB10 (phospho T73) antibody [MJF-R21] - BSA and Azide free (ab231707)

All lanes : Anti-RAB10 (phospho T73) antibody [MJF-R21] ([ab230261](#)) at 1/1000 dilution

Lane 1 : Wild-type MEF (mouse embryonic fibroblast cell line) whole cell lysate

Lane 2 : Wild-type MEF treated with 100 nM MLi-2 for 90 minutes, whole cell lysate

Lane 3 : LRRK2 [R1441C] knock-in MEF whole cell lysate

Lane 4 : LRRK2 [R1441C] knock-in MEF treated with 100 nM MLi-2 for 90 minutes, whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Predicted band size: 23 kDa

Observed band size: 23 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

The LRRK2 pathogenic mutation R1441C increases LRRK2 activity and markedly elevates RAB10 phosphorylation in MEF (mouse embryonic fibroblasts).

The expression pattern is consistent with the literature (PMID: 29127256).

The cell lysates were kindly provided by our collaborator, Dr. Dario Alessi.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab230261](#)).

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-RAB10 (phospho T73) antibody [MJF-R21] -
BSA and Azide free (ab231707)

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

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