

## Product datasheet

# Anti-RAB8A (phospho T72) antibody [MJF-R20] ab230260

Recombinant RabMAb

★★★★☆ **3 Abreviews** **18 References** [4 Images](#)

### Overview

<b>Product name</b>	Anti-RAB8A (phospho T72) antibody [MJF-R20]
<b>Description</b>	Rabbit monoclonal [MJF-R20] to RAB8A (phospho T72)
<b>Host species</b>	Rabbit
<b>Specificity</b>	This antibody cross-reacts with phosphorylated Rab3A, Rab10, Rab35 and Rab43. Please note that the immunogen sequence was derived from Rab8A but is identical to that of Rab8B.
<b>Tested applications</b>	<b>Suitable for:</b> WB, Dot blot
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	Dot Blot: Rab8 (phospho T72) peptide. WB: LRRK2 [R1441C] knock-in MEF (immortalized), whole cell lysate. HEK-293 cells transfected with LRRK2 [Y1699C] and HA-tagged Rab8A, Rab10 and Rab35 expression vectors, treated with 150 nM MLI-2.
<b>General notes</b>	<p>Please see PMID: 29127256. Lis P <i>et al.</i> Development of phospho-specific Rab protein antibodies to monitor in vivo activity of the LRRK2 Parkinson's disease kinase. <i>Biochem J</i> <b>475</b>:1-22 (2018).</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> <p>This antibody was developed with support from The Michael J. Fox Foundation.</p>



### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	MJF-R20
<b>Isotype</b>	IgG

## Applications

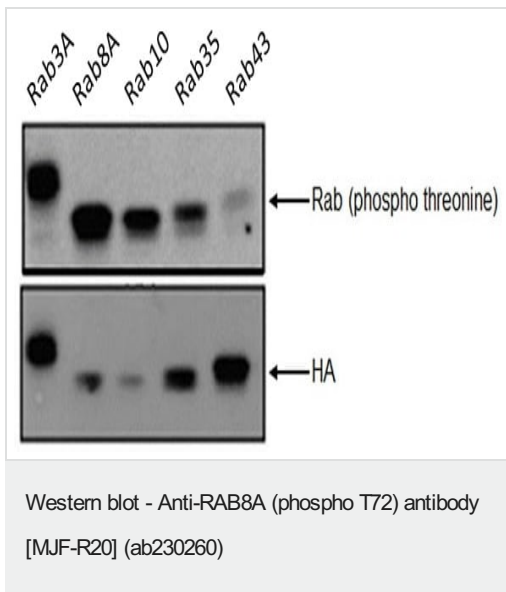
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab230260 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
<b>WB</b>	★★★★★ (3)	1/1000. Predicted molecular weight: 24 kDa.
<b>Dot blot</b>		1/1000.

## Target

<b>Function</b>	May be involved in vesicular trafficking and neurotransmitter release. Together with RAB11A, RAB3IP, the exocyst complex, PARD3, PRKCI, ANXA2, CDC42 and DNMBP promotes transcytosis of PODXL to the apical membrane initiation sites (AMIS), apical surface formation and lumenogenesis. Together with MYO5B and RAB11A participates in epithelial cell polarization.
<b>Sequence similarities</b>	Belongs to the small GTPase superfamily. Rab family.
<b>Cellular localization</b>	Cell membrane. Golgi apparatus. Cytoplasm > perinuclear region. Cell projection. Colocalizes with OPTN at the Golgi complex and in vesicular structures close to the plasma membrane. In the GDP-bound form, present in the perinuclear region. Shows a polarized distribution to distal regions of cell protrusions in the GTP-bound form. Colocalizes with PARD3, PRKCI, EXOC5, OCLN, PODXL and RAB11A in apical membrane initiation sites (AMIS) during the generation of apical surface and lumenogenesis.

## Images



**All lanes :** Anti-RAB8A (phospho T72) antibody [MJF-R20] (ab230260) at 1/1000 dilution

**Lane 1 :** HEK-293 cells transfected with LRRK2 [Y1699C] and HA-tagged Rab3A expression vectors, were treated with 150 nM MLI-2 for 90 minutes, whole cell lysate, 100 ng

**Lane 2 :** HEK-293 cells transfected with LRRK2 [Y1699C] and HA-tagged Rab8A expression vectors, were treated with 150 nM MLI-2 for 90 minutes, whole cell lysate, 100 ng

**Lane 3 :** HEK-293 cells transfected with LRRK2 [Y1699C] and HA-tagged Rab10 expression vectors, were treated with 150 nM MLI-2 for 90 minutes, whole cell lysate, 100 ng

**Lane 4 :** HEK-293 cells transfected with LRRK2 [Y1699C] and HA-tagged Rab35 expression vectors, were treated with 150 nM MLI-2 for 90 minutes, whole cell lysate, 100 ng

**Lane 5 :** HEK-293 cells transfected with LRRK2 [Y1699C] and HA-tagged Rab43 expression vectors, were treated with 150 nM MLI-2 for 90 minutes, whole cell lysate, 100 ng

### Secondary

**All lanes :** IRDye 800CW secondary antibody at 1/25000 dilution

**Predicted band size:** 24 kDa

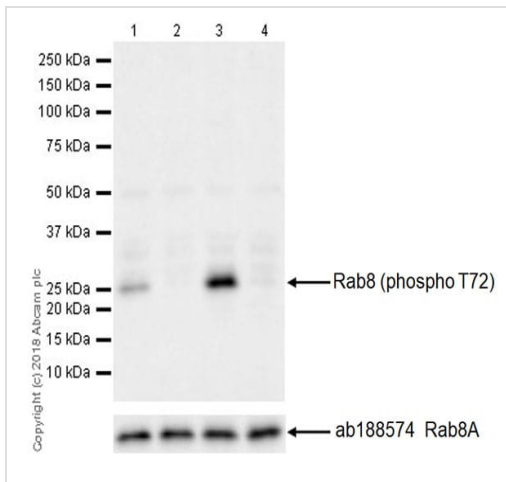
**Blocking buffer:** 5% NFDm/TBST.

**Dilution buffer:** 5% BSA/TBST.

The LRRK2 pathogenic mutation Y1699C increases LRRK2 activity and markedly elevates Rab8 phosphorylation in MEF (mouse embryonic fibroblasts).

The results show that this antibody recognizes other LRRK2-phosphorylated Rab proteins (Rab3A, Rab10, and Rab35). The phospho-threonine site in Rab8 (T72) differs from that of Rab3A (T86); Rab10 (T73); and Rab43 (T82).

The images were kindly provided by our collaborator, Dr. Dario Alessi, and have been published (PMID: 29127256).



Western blot - Anti-RAB8A (phospho T72) antibody [MJF-R20] (ab230260)

**All lanes** : Anti-RAB8A (phospho T72) antibody [MJF-R20] (ab230260) at 1/1000 dilution

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

**Lane 2** : Wild-type MEF (mouse embryonic fibroblast (immortalized)) treated with 100 nM MLI-2 for 90 minutes, whole cell lysate

**Lane 3** : LRRK2 [R1441C] knock-in MEF (mouse embryonic fibroblast (immortalized)), whole cell lysate

**Lane 4** : LRRK2 [R1441C] knock-in MEF (mouse embryonic fibroblast (immortalized)) 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:** 24 kDa

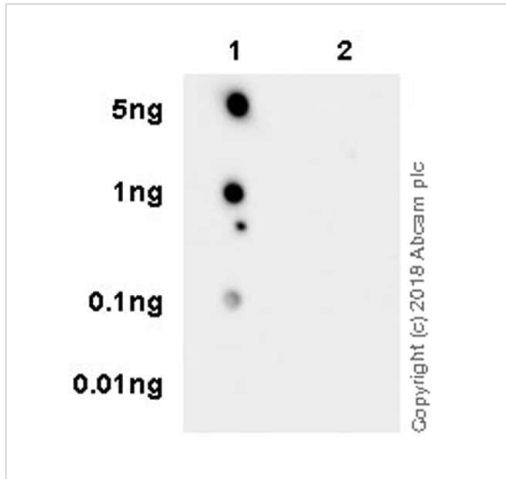
**Exposure time:** 1 minute

**Blocking/Dilution buffer and concentration:** 5% NFDM/TBST.

The LRRK2 pathogenic mutation R1441C increases LRRK2 activity and markedly elevates Rab8 phosphorylation in MEF (mouse embryonic fibroblasts).

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

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



Dot Blot - Anti-Rab8A (phospho T72) antibody [MJF-R20] (ab230260) used at a 1/1000 dilution.

**Lane 1:** Rab8 (phospho T72) peptide.

**Lane 2:** Rab8 non-phospho peptide.





**ab97051** secondary antibody used at a 1/100,000 dilution.

**Exposure time:** 32 seconds.

**Blocking/Dilution buffer and concentration:** 5% NFD/MTBST.

Dot Blot - Anti-RAB8A (phospho T72) antibody [MJF-R20] (ab230260)

Why choose a recombinant antibody?

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

Anti-RAB8A (phospho T72) antibody [MJF-R20] (ab230260)

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

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