

# Anti-LRRK2 (phospho S1292) antibody [MJFR-19-7-8] ab203181

重组 RabMAb

[42 References](#) [4 图像](#)

### 概述

产品名称	Anti-LRRK2 (phospho S1292)抗体[MJFR-19-7-8]
描述	兔单克隆抗体[MJFR-19-7-8] to LRRK2 (phospho S1292)
宿主	Rabbit
经测试应用	适用于: WB
种属反应性	与反应: Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: GFP-LRRK2 mutant G2019S transfected HEK293 lysate subjected to immunoprecipitation with GFP trap agarose.
常规说明	<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>



### 性能

形式	Liquid
存放说明	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.
存储溶液	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 59% PBS, 0.05% BSA
纯度	Protein A purified

克隆 单克隆  
 克隆编号 MJFR-19-7-8  
 同种型 IgG

## 应用

**The Abpromise guarantee** **Abpromise™**承诺保证使用ab203181于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/1000. Detects a band of approximately 286 kDa (predicted molecular weight: 286 kDa).

## 靶标

**功能** Positively regulates autophagy through a calcium-dependent activation of the CaMKK/AMPK signaling pathway. The process involves activation of nicotinic acid adenine dinucleotide phosphate (NAADP) receptors, increase in lysosomal pH, and calcium release from lysosomes. Together with RAB29, 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). Plays a role in synaptic vesicle trafficking. Phosphorylates PRDX3. Has GTPase activity. May play a role in the phosphorylation of proteins central to Parkinson disease.

**组织特异性** Expressed in the brain. Expressed in pyramidal neurons in all cortical laminae of the visual cortex, in neurons of the substantia nigra pars compacta and caudate putamen (at protein level). Expressed throughout the adult brain, but at a lower level than in heart and liver. Also expressed in placenta, lung, skeletal muscle, kidney and pancreas. In the brain, expressed in the cerebellum, cerebral cortex, medulla, spinal cord occipital pole, frontal lobe, temporal lobe and putamen. Expression is particularly high in brain dopaminoceptive areas.

**疾病相关** Parkinson disease 8

**序列相似性** Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. Contains 12 LRR (leucine-rich) repeats. Contains 1 protein kinase domain. Contains 1 Roc domain. Contains 7 WD repeats.

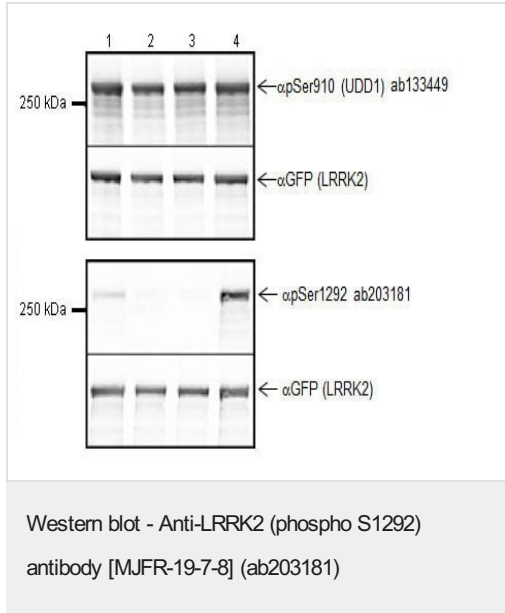
**结构域** The seven-bladed WD repeat region is critical for synaptic vesicle trafficking and mediates interaction with multiple vesicle-associated presynaptic proteins. The Roc domain mediates homodimerization and regulates kinase activity.

**翻译后修饰** Autophosphorylated.

**细胞定位** Membrane. Cytoplasm. Perikaryon. Mitochondrion. Golgi apparatus. Cell projection, axon. Cell projection, dendrite. Endoplasmic reticulum. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane. Endosome. Lysosome. Mitochondrion outer membrane. Mitochondrion inner membrane. Mitochondrion matrix. Predominantly associated with intracytoplasmic vesicular and membranous structures (By similarity). Localized in the cytoplasm and associated with cellular membrane structures. Predominantly associated with the mitochondrial outer membrane of the

mitochondria. Colocalized with RAB29 along tubular structures emerging from Golgi apparatus. Localizes in intracytoplasmic punctate structures of neuronal perikarya and dendritic and axonal processes.

## 图片



**All lanes :** Anti-LRRK2 (phospho S1292) antibody [MJFR-19-7-8] (ab203181) at 1  $\mu$ g/ml

**Lane 1 :** GFP-LRRK2 wt transfected HEK293 lysate subjected to immunoprecipitation with GFP trap agarose

**Lane 2 :** GFP-LRRK2 mutant D2017A transfected HEK293 lysate subjected to immunoprecipitation with GFP trap agarose

**Lane 3 :** GFP-LRRK2 mutant S1292A/G2019S transfected HEK293 lysate subjected to immunoprecipitation with GFP trap agarose

**Lane 4 :** GFP-LRRK2 mutant G2019S transfected HEK293 lysate subjected to immunoprecipitation with GFP trap agarose

Lysates/proteins at 10  $\mu$ g per lane.

### Secondary

**All lanes :** Goat anti-rabbit (IRDye 800) at 1/10000 dilution

**Predicted band size:** 286 kDa

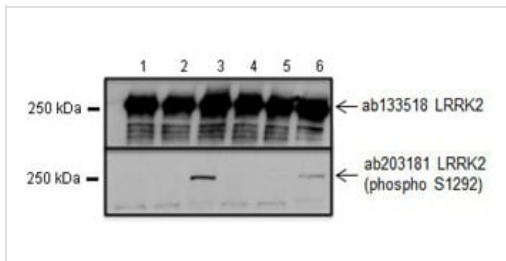
**Observed band size:** 313 kDa

Blocking/Dilution buffer: 5% BSA/TBST.

The image is provided by Dr. Jeremy Nicols, Parkinson's Institute, Sunnyvale, CA, USA.

G2019S mutation results in an increased LRRK2 auto-phosphorylation including S1292 (lane 4).

Observed band size: 286 + 27 (GFP) = 313 kDa.



Western blot - Anti-LRRK2 (phospho S1292) antibody [MJFR-19-7-8] (ab203181)

**All lanes :** Anti-LRRK2 (phospho S1292) antibody [MJFR-19-7-8] (ab203181) at 1 µg/ml

**Lane 1 :** LRRK2 mutant G2019S/S1292A transfected HEK293 lysate

**Lane 2 :** LRRK2 mutant G2019S transfected HEK293 inhibitor treated lysate

**Lane 3 :** LRRK2 mutant G2019S transfected HEK293 lysate

**Lane 4 :** LRRK2 mutant S1292A transfected HEK293 lysate

**Lane 5 :** LRRK2 wt transfected HEK293 inhibitor treated lysate

**Lane 6 :** LRRK2 wt transfected HEK293 lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** Goat anti-rabbit HRP at 1/2500 dilution

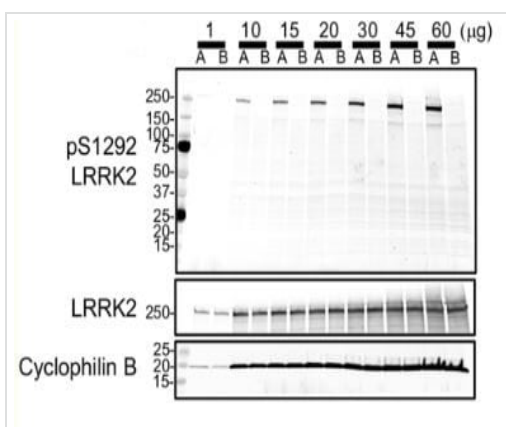
**Predicted band size:** 286 kDa

**Observed band size:** 286 kDa

Blocking/Dilution buffer: 5% NFD/MTBST.

The image is provided by Dr. Paul Davies, University of Dundee, Dundee Scotland, UK.

G2019S mutation results in an increased LRRK2 auto-phosphorylation including S1292 (lane 3).



Western blot - Anti-LRRK2 (phospho S1292) antibody [MJFR-19-7-8] (ab203181)

Kluss et al NPJ Parkinsons Dis. 2018; 4: 13. Published online 2018 Apr 19. doi: 10.1038/s41531-018-0049-1

### Characterization of pS1292 LRRK2 antibody

Increasing amounts of HEK-293FT lysates transiently expressing WT LRRK2 (A) or S1292A LRRK2 (B) were analyzed by western blot and probed with the commercially available anti-pS1292 LRRK2 antibody (ab203181). The antibody showed minimal non-specific bands and linear detection in the range tested (b).

From Figure1a of Kluss et al.

Kluss et al **NPJ Parkinsons Dis**. 2018; 4: 13. Published online 2018 Apr 19. doi: [10.1038/s41531-018-0049-1](https://doi.org/10.1038/s41531-018-0049-1)

Reproduced under Creative Commons Attribution 4.0 International License <http://creativecommons.org/licenses/by/4.0/>.

## 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-LRRK2 (phospho S1292) antibody [MJFR-19-7-8] (ab203181)

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

### Our Abpromise to you: Quality guaranteed and expert technical support

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.cn/abpromise> or contact our technical team.

### Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors