

Anti-LRRK2 (phospho S910) antibody [UDD1 15(3)] ab133449

重组 RabMAb

[14 References](#) [2 图像](#)

概述

产品名称	Anti-LRRK2 (phospho S910)抗体[UDD1 15(3)]
描述	兔单克隆抗体[UDD1 15(3)] to LRRK2 (phospho S910)
宿主	Rabbit
经测试应用	适用于: WB 不适用于: Flow Cyt, ICC/IF, IHC-P or IP
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	GFP-LRRK2 lysate and Lymphoblastoid lysate
常规说明	<p>This antibody was developed with the support of The Michael J. Fox Foundation (MJFF) and in partnership with Dr. Dario Alessi (MRC Protein Phosphorylation Unit, University of Dundee) to help accelerate LRRK2 research. Dr. Alessi has characterized several unique and high quality LRRK2 rabbit monoclonal antibodies, generated by Abcam, to be made widely available for PD research community.</p> <p>LRRK2 (Leucine-rich repeat kinase 2, dardarin) is a multi-domain protein belonging to the ROCO family of proteins that contains a kinase and GTPase domain among its many protein interaction domains. LRRK2 is mutated in a significant number of Parkinson's disease (PD) patients. Mutations in this gene account for 4% of PD, and are observed in 1% of sporadic PD patients. The most common mutation replaces glycine 2019 with a serine that results in increased LRRK2 kinase activity. This indicates that inhibitors of LRRK2 kinase activity might be of therapeutic benefit for the treatment of Parkinson's disease and has stimulated much activity in this field of research.</p> <p>Recent work has revealed that LRRK2 interacts with 14-3-3 phospho-binding adaptor isoforms that is mediated by phosphorylation of Ser910 and Ser935 located prior to the leucine rich repeat domain mediates. Interestingly, 14-3-3 binding has been linked to Parkinson's disease as Ser910 as well as Ser935 and interaction with the 14-3-3 is inhibited by five of the six validated LRRK2 pathogenic mutations (R1441C, R1441G, R1441H, Y1699C and I2020T). The Dundee-MJFF LRRK2 PhosphoSer935 antibody will be of great utility in further understanding the link between 14-3-3 binding to LRRK2 and Parkinson's disease as well as assessing the efficacy of LRRK2 inhibitors that are being developed.</p> <p>It should be noted the Dundee-MJFF antibody is highly selective and sensitive and can readily be used to monitor LRRK2 Ser910 phosphorylation in immunoblot analysis of 2-20 microgram amounts of whole cell extract. The Dundee-MJFF LRRK2 PhosphoSer910 recognizes human but</p>

not mouse endogenous LRRK2.

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](#).

Mouse: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

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



性能

形式	Liquid
存放说明	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
存储溶液	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	UDD1 15(3)
同种型	IgG

应用

The Abpromise guarantee **Abpromise™** 承诺保证使用 ab133449 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 - 1/5000. Detects a band of approximately 286 kDa (predicted molecular weight: 286 kDa).

应用说明 Is unsuitable for Flow Cyt, ICC/IF, IHC-P or IP.

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 dopaminergic 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.

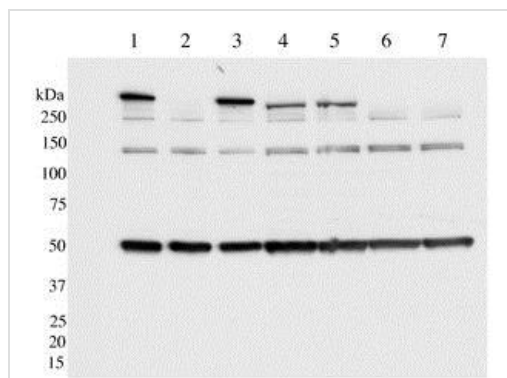
翻译后修饰

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



Western blot - Anti-LRRK2 (phospho S910) antibody [UDD1 15(3)] (ab133449)

All lanes : Anti-LRRK2 (phospho S910) antibody [UDD1 15(3)] (ab133449) at 1/1000 dilution

Lane 1 : GFP tagged WT LRRK2 lysate at 5 μ g

Lane 2 : GFP LRRK2 S910A lysate at 5 μ g

Lane 3 : GFP LRRK2 S935A lysate at 5 μ g

Lanes 4-5 : Lymphoblastoid lysate at 30 μ g

Lanes 6-7 : Lymphoblastoid lysate from LRRK2 IN1 treated cells at 30 μ g

Secondary

All lanes : HRP conjugated goat anti-rabbit antibody at 1/2000 dilution

Predicted band size: 286 kDa

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

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(ab133449)

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