

产品名称: LRRK2 (16M6) Rabbit Monoclonal Antibody

产品货号: AMRe13445

产品概述 (Summary)

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|-------------------|--|
| 描述 (Description) | Recombinant rabbit monoclonal antibody |
| 宿主 (Host) | Rabbit |
| 应用 (Application) | WB,IHC,ICC/IF |
| 种属反应 (Reactivity) | Human,Mouse |
| 偶联物 (Conjugation) | Unconjugated |
| 修饰 (Modification) | Unmodified |
| 同种型 (Isotype) | IgG |
| 克隆 (Clonality) | Monoclonal |
| 剂型 (Form) | Liquid |
| 保存条件 (Storage) | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles. |
| 储存溶液 (Buffer) | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |
| 纯化 (Purification) | Affinity purification |

产品应用 (Application)

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|------------------------|---|
| 稀释比 (Dilution Ratio) | WB 1:1000-1:5000, IHC 1:100-1:200, ICC/IF 1:100-1:200 |
| 分子量 (Molecular Weight) | 286kDa |

抗原信息 (Antigen Information)

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|------------------------|---|
| 基因名 (Gene Name) | LRRK2 |
| 别名 (Alternative Names) | Leucine-rich repeat serine/threonine-protein kinase 2; Dardarin; PARK8; ROCO2; RIPK7; LRRK2 |
| 基因 ID (Gene ID) | 120892.0 |
| SwissProt ID | Q5S007 |
| 免疫原 (Immunogen) | A synthetic peptide of human LRRK2 |

研究背景 (Background)

LRRK2 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. Serine/threonine-protein kinase which phosphorylates a broad range of proteins involved in multiple processes such as neuronal plasticity, autophagy, and vesicle trafficking (PubMed:20949042, PubMed:22012985, PubMed:26824392, PubMed:29125462, PubMed:28720718, PubMed:29127255, PubMed:30398148, PubMed:29212815, PubMed:30635421, PubMed:21850687, PubMed:23395371, PubMed:17114044, PubMed:24687852, PubMed:26014385, PubMed:25201882). Is a key regulator of RAB GTPases by regulating the GTP/GDP exchange and interaction partners of RABs through phosphorylation (PubMed:26824392, PubMed:28720718, PubMed:29127255, PubMed:30398148, PubMed:29212815, PubMed:29125462, PubMed:30635421). Phosphorylates RAB3A, RAB3B, RAB3C, RAB3D, RAB5A, RAB5B, RAB5C, RAB8A, RAB8B, RAB10, RAB12, RAB35, and RAB43 (PubMed:26824392, PubMed:28720718, PubMed:29127255, PubMed:30398148, PubMed:29212815, PubMed:29125462, PubMed:30635421, PubMed:23395371). Regulates the RAB3IP-catalyzed GDP/GTP exchange for RAB8A through the phosphorylation of 'Thr-72' on RAB8A (PubMed:26824392). Inhibits the interaction between RAB8A and GDI1 and/or GDI2 by phosphorylating 'Thr- 72' on RAB8A (PubMed:26824392). Regulates primary ciliogenesis through phosphorylation of RAB8A and RAB10, which promotes SHH signaling in the brain (PubMed:29125462, PubMed:30398148). 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 (PubMed:23395371). Regulates neuronal process morphology in the intact central nervous system (CNS) (PubMed:17114044). Plays a role in synaptic vesicle trafficking (PubMed:24687852). Plays an important role in recruiting SEC16A to endoplasmic reticulum exit sites (ERES) and in regulating ER to Golgi vesicle-mediated transport and ERES organization (PubMed:25201882). Positively regulates autophagy through a calcium-dependent activation of the CaMKK/AMPK signaling pathway (PubMed:22012985). The process involves activation of nicotinic acid adenine dinucleotide phosphate (NAADP) receptors, increase in lysosomal pH, and calcium release from lysosomes (PubMed:22012985). Phosphorylates PRDX3 (PubMed:21850687). By phosphorylating APP on 'Thr-743', which promotes the production and the nuclear translocation of the APP intracellular domain (AICD), regulates dopaminergic neuron apoptosis (PubMed:28720718). Independent of its kinase activity, inhibits the proteosomal degradation of MAPT, thus promoting MAPT oligomerization and secretion (PubMed:26014385). In addition, has GTPase activity via its Roc domain which regulates LRRK2 kinase activity (PubMed:18230735, PubMed:26824392, PubMed:29125462, PubMed:28720718, PubMed:29212815).

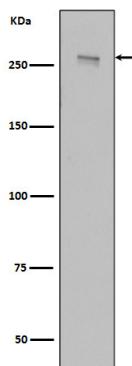
研究领域 (Research Area)

Autophagy,MAPK signaling pathway

注意事项 (Note)

For research use only.

图片 (Image Data)



Western blot analysis of LRRK2 in HEK293 cell lysate transfected with 3*Flag wild type, full length LRRK2.



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| 产品类别 | 产品货号 | 产品名称 |
|-----------------------------|----------|--|
| WB 解决方案 | RA10020 | 2h 极速 WB 即用型全流程试剂盒 |
| | RA10021 | 4h 快速 WB 即用型全流程试剂盒 |
| | RA10042 | 5h 畅享版 WB 全流程试剂盒 |
| | RA10037 | 校准级彩色预染蛋白 Marker (8-180kDa) |
| | RA10038 | 校准级彩色预染蛋白 Marker (10-250kDa) |
| | RA10039 | 校准级高分子彩色预染蛋白 Marker (25-400kDa) |
| TSA 多重荧光染色试剂盒 | RA10008 | TSA 双标三色多重荧光染色试剂盒 (miIHC) |
| | RA10009 | TSA 三标四色多重荧光染色试剂盒 (miIHC) |
| | RA10010 | TSA 四标五色多重荧光染色试剂盒 (miIHC) |
| | RA10011 | TSA 五标六色多重荧光染色试剂盒 (miIHC) |
| | RA10012 | TSA 六标七色多重荧光染色试剂盒 (miIHC) |
| IHC 检测试剂盒 | RA10006 | HRP Anti-Mouse/Rabbit IHC Detection System |
| | RA10007 | Polymer-HRP Anti-Mouse/Rabbit IHC Detection System |
| 抗体标记试剂盒 | RE80004p | 辣根过氧化物酶(HRP)抗体标记试剂盒 |
| | RE80002q | Sulfo-NHS-生物素标记试剂盒 |
| | RE80007p | Cy3 荧光素标记试剂盒 |
| | RE80011p | Fluor488 荧光素标记试剂盒 |
| | RE80017p | Fluor750 荧光素标记试剂盒 |
| | RE80005p | 藻红蛋白(R-PE) 抗体快速标记试剂盒 |
| | RE80040 | PE-Cy7 串联染料抗体快速标记试剂盒 |
| 稳转细胞系构建服务 (免费赠送全膜 WB 验证) | TS-0001 | 过表达稳转细胞系构建 |
| | TS-0002 | 敲低稳转细胞系构建 |
| | TS-0003 | 敲除细胞系构建 |

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