

LRRK2 Rabbit mAb
Catalog # AP77365**Specification**

LRRK2 Rabbit mAb - Product Information

Application	WB
Primary Accession	Q5S007
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	286103

LRRK2 Rabbit mAb - Additional Information

Gene ID 120892

Other Names

LRRK2

Dilution

WB~~1/500-1/1000

Format

Liquid

LRRK2 Rabbit mAb - Protein Information

Name LRRK2

Synonyms PARK8

Function

Serine/threonine-protein kinase which phosphorylates a broad range of proteins involved in multiple processes such as neuronal plasticity, innate immunity, autophagy, and vesicle trafficking (PubMed: [17114044](http://www.uniprot.org/citations/17114044) , PubMed: [20949042](http://www.uniprot.org/citations/20949042) , PubMed: [21850687](http://www.uniprot.org/citations/21850687) , PubMed: [22012985](http://www.uniprot.org/citations/22012985) , PubMed: [23395371](http://www.uniprot.org/citations/23395371) , PubMed: [24687852](http://www.uniprot.org/citations/24687852) , PubMed: [25201882](http://www.uniprot.org/citations/25201882) , PubMed: [26014385](http://www.uniprot.org/citations/26014385) , PubMed: [26824392](http://www.uniprot.org/citations/26824392) , PubMed: [27830463](http://www.uniprot.org/citations/27830463) , PubMed: [28720718](http://www.uniprot.org/citations/28720718) , PubMed: [29125462](http://www.uniprot.org/citations/29125462) , PubMed: [29127255](http://www.uniprot.org/citations/29127255) , PubMed: [29212815](http://www.uniprot.org/citations/29212815)),

<http://www.uniprot.org/citations/28720718> target="_blank">28720718, PubMed:29125462, PubMed:29212815). Recruited by RAB29/RAB7L1 to overloaded lysosomes where it phosphorylates and stabilizes RAB8A and RAB10 which promote lysosomal content release and suppress lysosomal enlargement through the EHBP1 and EHBP1L1 effector proteins (PubMed:30209220, PubMed:38227290).

Cellular Location

Cytoplasmic vesicle. Perikaryon. Golgi apparatus membrane; Peripheral membrane protein. Cell projection, axon. Cell projection, dendrite. Endoplasmic reticulum membrane; Peripheral membrane protein. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane. Endosome {ECO:0000250|UniProtKB:Q5S006}. Lysosome Mitochondrion outer membrane; Peripheral membrane protein. Cytoplasm, cytoskeleton. Cytoplasmic vesicle, phagosome {ECO:0000250|UniProtKB:Q5S006}. Note=Colocalized with RAB29 along tubular structures emerging from Golgi apparatus (PubMed:23395371). Localizes to endoplasmic reticulum exit sites (ERES), also known as transitional endoplasmic reticulum (tER) (PubMed:25201882). Detected on phagosomes and stressed lysosomes but not detected on autophagosomes induced by starvation (By similarity) Recruitment to stressed lysosomes is dependent on the ATG8 conjugation system composed of ATG5, ATG12 and ATG16L1 and leads to lysosomal stress-induced activation of LRRK2 (By similarity) {ECO:0000250|UniProtKB:Q5S006, ECO:0000269|PubMed:23395371, ECO:0000269|PubMed:25201882}

Tissue Location

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 in neutrophils (at protein level) (PubMed:29127255). Expressed in the brain. 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.

LRRK2 Rabbit mAb - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

LRRK2 Rabbit mAb - Images



