abcam

Product datasheet

Anti-LRRK2 (phospho S935) antibody [UDD2 10(12)] - BSA and Azide free ab172382

Recombinant RabMAb

12 References 4 Images

Overview

Product name	Anti-LRRK2 (phospho S935) antibody [UDD2 10(12)] - BSA and Azide free
Description	Rabbit monoclonal [UDD2 10(12)] to LRRK2 (phospho S935) - BSA and Azide free
Host species	Rabbit
Specificity	The antibody does not give a positive signal in U-87 MG, SH-SY-5Y and human fetal brain. Please contact our Scientific Support team if you have any question.
Tested applications	**Suitable for:** WB **Unsuitable for:** ICC/IF or IHC-P
Species reactivity	**Reacts with:** Mouse, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: GFP LRRK2, GFP LRRK2 S910A, GFP LRRK2 S935A, LRRK2 WT MEF, LRRK2 WT MEF, Lymphoblastoid, NIH/3T3 and RAW 264.7 cell lysates.
General notes	ab172382 is the carrier-free version of **ab133450**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. 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**.

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

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	UDD2 10(12)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab172382 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
WB		Use at an assay dependent concentration. Detects a band of approximately 286 kDa (predicted molecular weight: 286 kDa). Please check the parent abID, **ab133450**, for a recommended dilution.

Application notes Is unsuitable for ICC/IF or IHC-P.

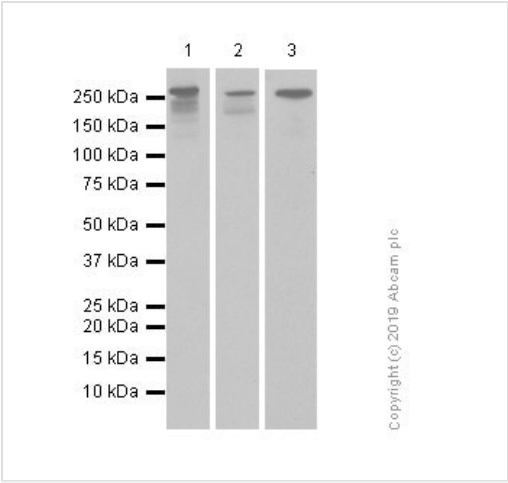
Target

Function 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.

Tissue specificity 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.
Involvement in disease	Parkinson disease 8
Sequence similarities	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.
Domain	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.
Post-translational modifications	Autophosphorylated.
Cellular localization	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.

Images



Western blot - Anti-LRRK2 (phospho S935) antibody [UDD2 10(12)] - BSA and Azide free (ab172382)

All lanes : Anti-LRRK2 (phospho S935) antibody [UDD2 10(12)] - BSA and Azide free (ab172382) at 1/10000 dilution

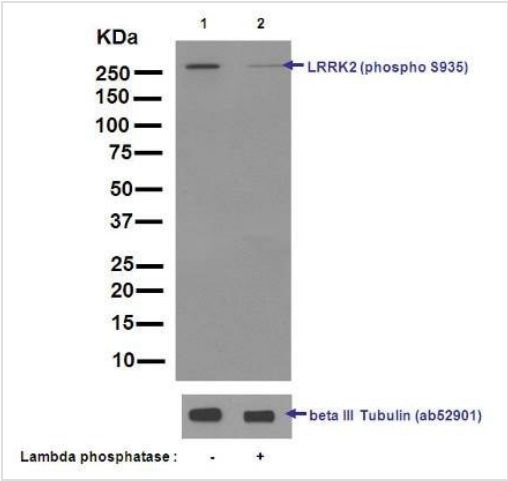
Lane 1 : Wide type-LRRK2 overexpressed lysates
Lane 2 : NIH/3T3 (Mouse embryonic fibroblast) whole cell lysates
Lane 3 : RAW 264.7(Mouse Abelson murine leukemia virus-induced tumor macrophage)whole cell lysates

Lysates/proteins at 15 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 286 kDa

Exposure:
Lane 1 and 2: 5 seconds.
Lane 3: 180 seconds.



Western blot - Anti-LRRK2 (phospho S935) antibody [UDD2 10(12)] - BSA and Azide free (ab172382)

All lanes : Anti-LRRK2 (phospho S935) antibody [UDD2 10(12)] (**ab133450**) at 1/5000 dilution

Lane 1 : WT-LRRK2 cell lysate - untreated
Lane 2 : WT-LRRK2 cell lysate - treated with Lambda phosphatase

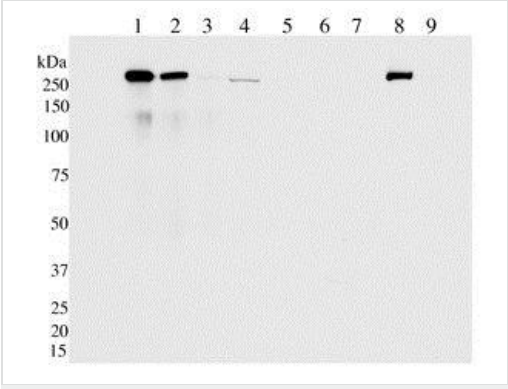
Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 286 kDa

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab133450**).



Western blot - Anti-LRRK2 (phospho S935) antibody [UDD2 10(12)] - BSA and Azide free (ab172382)

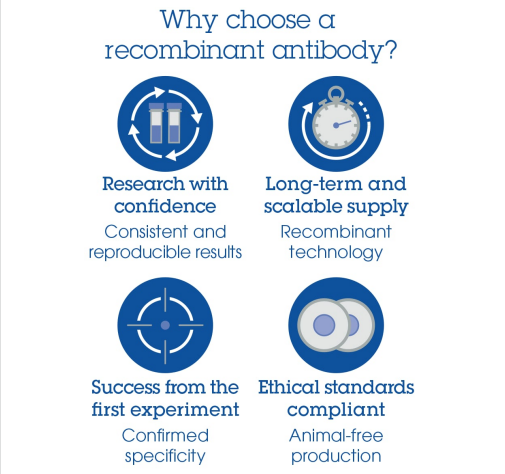
All lanes : Anti-LRRK2 (phospho S935) antibody [UDD2 10(12)] (**ab133450**) at 1/1000 dilution (unpurified)

Lane 1 : GFP LRRK2 lysate at 5 µg
Lane 2 : GFP LRRK2 S910A lysate at 5 µg
Lane 3 : GFP LRRK2 S935A lysate at 5 µg
Lane 4 : LRRK2 WT MEF lysate at 20 µg
Lane 5 : LRRK2 WT MEF lysate from LRRK2 IN1 treated cells at 20 µg
Lane 6 : LRRK2 KO MEF lysate at 20 µg
Lane 7 : LRRK2 KO MEF lysate from LRRK2 IN1 treated cells at 20 µg
Lane 8 : Lymphoblastoid lysate at 30 µg
Lane 9 : Lymphoblastoid lysate from LRRK2 IN1 treated cells at 30 µg

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

Predicted band size: 286 kDa

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab133450**).



Anti-LRRK2 (phospho S935) antibody [UDD2 10(12)] - BSA and Azide free (ab172382)

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