

Product datasheet for **MC225344**

Lrrk2 (NM_025730) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Lrrk2 (NM_025730) Mouse Untagged Clone
Tag: Tag Free
Symbol: Lrrk2
Synonyms: 4921513O20Rik; 9330188B09Rik; AW561911; cl-46; D630001M17Rik; Gm927
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC225344 representing NM_025730
Red=Cloning site **Blue**=ORF **Orange**=Stop codon

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GCC**CGATCGCC**

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- Restriction Sites:** SgfI-MluI
- ACCN:** NM_025730
- Insert Size:** 7584 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_025730.3](#), [NP_080006.3](#)

RefSeq Size: 8231 bp

RefSeq ORF: 7584 bp

Locus ID: 66725

UniProt ID: [Q5S006](#)

Cytogenetics: 15 E3

Gene Summary: 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). Phosphorylates PRDX3. Has GTPase activity (By similarity). 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).[UniProtKB/Swiss-Prot Function]