

## PRODUCT DATA SHEET

Bioworld Technology,Inc.

# LRRK2 monoclonal antibody

Catalog: MB67126 Host: Mouse Reactivity: Human, Mouse

# **BackGround:**

Parkinson's disease (PD), the second most common neurodegenerative disease after Alzheimer's, is a progressive movement disorder characterized by rigidity, tremors, and postural instability. The pathological hallmarks of PD are progressive loss of dopaminergic neurons in the substantia nigra of the ventral midbrain and the presence of intracellular Lewy bodies (protein aggregates α-synuclein, ubiquitin, and other components) in surviving neurons of the brain stem. Research studies have shown various genes and loci are genetically linked to PD including α-synuclein/PARK1 and 4, parkin/PARK2, UCH-L1/PARK5, PINK1/PARK6, DJ-1/PARK7. LRRK2/PARK8, synphilin-1, and NR4A2.

Leucine-rich repeat kinase 2 (LRRK2) contains amino-terminal leucine-rich repeats (LRR), a Ras-like small GTP binding protein-like (ROC) domain, an MLK protein kinase domain, and a carboxy-terminal WD40 repeat domain. Research studies have linked at least 20 LRRK2 mutations to PD, with the G2019S mutation being the most prevalent. The G2019S mutation causes increased LRRK2 kinase activity, which induces a progressive reduction in neurite length that leads to progressive neurite loss and decreased neuronal survival . Researchers are currently testing the MLK inhibitor CEP-1347 in PD clinical trials, indicating the potential value of LRRK2 as a therapeutic target for treatment of PD.

#### **Product:**

Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.

### **Molecular Weight:**

~ 180 kDa

## **Swiss-Prot:**

Q5S007

#### **Purification&Purity:**

This antibody is purified through a protein G column.

#### **Applications:**

WB (1/500 - 1/1000)

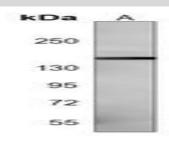
#### **Storage&Stability:**

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at -20  $\mathrm{C}$  long term. Avoid freeze-thaw cycles.

### **Specificity:**

Recognizes endogenous levels of LRRK2 protein.

### **DATA:**



Western blot analysis of LRRK2 expression in mouse brain (A) whole cell lysates.

## Note:

For research use only, not for use in diagnostic procedure.

### Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park,

MN 55416,USA.

Email: <u>info@bioworlde.com</u>

Tel: 6123263284 Fax: 6122933841 Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046,

P. R. China.

Email: <u>info@biogot.com</u>
Tel: 0086-025-68037686
Fax: 0086-025-68035151