

LRRK1 (T-15): sc-160499

BACKGROUND

The phosphorylation and dephosphorylation of proteins on serine and threonine residues is an essential means of regulating a broad range of cellular functions in eukaryotes, including cell division, homeostasis and apoptosis. A group of proteins that are intimately involved in this process are the serine/threonine (Ser/Thr) protein kinases. LRRK1 (leucine-rich repeat serine/threonine-protein kinase 1), also known as RIPK6, Roco1 or KIAA1790, is a 2,038 amino acid cytoplasmic protein that contains one protein kinase domain, four ANK repeats and 11 leucine-rich repeats and belongs to the Ser/Thr protein kinase family. Using magnesium as a cofactor, LRRK1 catalyzes the ATP-dependent phosphorylation of target proteins. The gene encoding LRRK1, which is expressed as four alternatively spliced isoforms, is thought to be involved in the pathogenesis of Parkinson's disease.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: LRRK1 (human) mapping to 15q26.3; Lrrk1 (mouse) mapping to 7 C.

SOURCE

LRRK1 (T-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LRRK1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-160499 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LRRK1 (T-15) is recommended for detection of LRRK1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

LRRK1 (T-15) is also recommended for detection of LRRK1 in additional species, including porcine.

Suitable for use as control antibody for LRRK1 siRNA (h): sc-89929, LRRK1 siRNA (m): sc-149115, LRRK1 shRNA Plasmid (h): sc-89929-SH, LRRK1 shRNA Plasmid (m): sc-149115-SH, LRRK1 shRNA (h) Lentiviral Particles: sc-89929-V and LRRK1 shRNA (m) Lentiviral Particles: sc-149115-V.

Molecular Weight of LRRK1: 200 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.