Human LRRK2 Alexa Fluor® 647-conjugated Antibody

Monoclonal Mouse IgG_1 Clone # 521309

Catalog Number: FAB66741R

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human LRRK2 in direct ELISAs.
Source	Monoclonal Mouse IgG_1 Clone # 521309
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant human LRRK2 Val241-Val500 Accession # Q5S007
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

LRRK2 (Leu-rich repeat/LRR-containing protein kinase 2; also Dardarin) is a 260-280 kDa member of the TKL (Tyr kinase-like) Ser/Thr protein kinase family of molecules. It is unusual in that it possesses both GTPase and protein kinase enzyme activity. LRRK2 is expressed in dopamine system neurons, macrophages and B2 B cells (in rodent), and mutations of the molecule are associated with the pathogenesis of Parkinson's disease. Through its protein kinase activity, LRRK2 phosphorylates both 4E-BP and FoxO1, two molecules involved in the initiation of protein translation. Human LRRK2 is 2527 amino acids (aa) in length. It contains multiple domains, including 16 LRRs (aa 226-249; 791-1291; 1556-1887), one coiled-coil region (aa 319-348), a GTPase Roc domain (aa 1328-1511), a protein kinase region (aa 1879-2138), and a WD40 domain (aa 2168-2387). There are three potential splice variants for LRRK2. One shows an alternative start site at Met1203 coupled to a 26 aa substitution for aa 2465-2527, a second contains a three aa substitution for aa 1-1165, and a third possesses an alternative start site at Met402 accompanied by a 12 aa substitution for aa 1259-2527. Over aa 241-500, human LRRK2 shares 85% aa identity with mouse LRRK2.

PRODUCT SPECIFIC NOTICES

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