For Research Use Only

PINK1 Recombinant monoclonal antibody

Catalog Number:81991-4-RR 2 Publications



Basic Information

Catalog Number: 81991-4-RR

Source: Rabbit Isotype: IgG

Immunogen Catalog Number:

AG19825

GenBank Accession Number:

BC028215 GeneID (NCBI): 65018 UNIPROT ID: Q9BXM7 Full Name:

PTEN induced putative kinase 1

Calculated MW: 581 aa, 63 kDa Observed MW: 46 kDa Purification Method:

Protein A purification

CloneNo.: 240449E7

Recommended Dilutions: WB: 1:2000-1:10000

FC (Intra): 0.25 ug per 10^6 cells in a

100 µl suspension

Applications

Tested Applications: WB, FC (Intra), ELISA Cited Applications:

WB. IP

Species Specificity: human, mouse, rat Cited Species: human, mouse Positive Controls:

WB: HeLa cells, A549 cells, mouse brain tissue, rat

brain tissue

FC (Intra): Jurkat cells,

Background Information

PINK1 is a mitochondrial serine/threonine-protein kinase that protects cells from stress-induced mitochondrial dysfunction. The precursor of PINK1 (65 kDa) is synthesized in the cytosol and is imported into the outer membrane of mitochondria. PINK1 is further transferred into the inner membrane. The full-length PINK1 can be proteolytically processed into 52-55 kDa and 45-46 kDa forms (PMID: 18221368; 25108683; 18031932). The half-life of the mature form of PINK1 is very short and it was proposed that the proteasome is involved in its degradation (PMID: 23472196). The gene of PINK1 maps to chromosome 1p36.12. Two alternatively spliced variants exist, the shorter isoform (30 kDa) produced by alternative splicing. Mutations in the PINK1 gene cause autosomal recessive early-onset Parkinson's disease.

Notable Publications

Author	Pubmed ID	Journal	Application
Dan Wu	40049542	Mitochondrion	WB
Liam Pollock	40020067	Sci Adv	WB,IP

Storage

Storage:

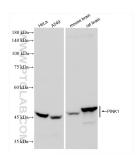
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

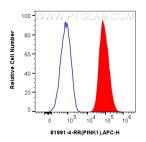
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

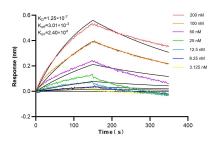
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 81991-4-RR (PINK1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



1x10^6 Jurkat cells were intracellularly stained with 0.25 ug PINK1 Recombinant antibody (81991-4-RR, Clone:240449E7) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Ruffer



Biolayer interferometry (BL1) kinetic assays of 81991-4-RR against Human PINK1 were performed. The affinity constant is 125 nM.