

For Research Use Only

PARK7/DJ-1 Recombinant antibody

Catalog Number: 82913-2-RR

Featured Product



Basic Information

Catalog Number:

82913-2-RR

Size:

100ul, Concentration: 1000 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG2287

GenBank Accession Number:

BC008188

GeneID (NCBI):

11315

UNIPROT ID:

Q99497

Full Name:

Parkinson disease (autosomal recessive, early onset) 7

Calculated MW:

189 aa, 20 kDa

Observed MW:

25 kDa

Purification Method:

Protein A purification

CloneNo.:

230124B7

Recommended Dilutions:

WB: 1:2000-1:10000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IF/ICC: 1:125-1:500

FC (Intra): 0.25 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IF/ICC, FC (Intra), IP, ELISA

Species Specificity:

human, mouse, rat

Positive Controls:

WB: HeLa cells, HEK-293 cells, BxPC-3 cells, Jurkat cells, HSC-T6 cells, mouse brain tissue, rat brain tissue

IP: HeLa cells,

IF/ICC: SH-SY5Y cells,

FC (Intra): HeLa cells,

Background Information

PARK7, also named as DJ1, belongs to the peptidase C56 family. It protects cells against oxidative stress and cell death. PARK7 plays a role in regulating expression or stability of the mitochondrial uncoupling proteins SLC25A14 and SLC25A27 in dopaminergic neurons of the substantia nigra pars compacta and attenuates the oxidative stress induced by calcium entry into the neurons via L-type channels during pacemaking. It eliminates hydrogen peroxide and protects cells against hydrogen peroxide-induced cell death. PARK7 has cell-growth promoting activity and transforming activity. It may function as a redox-sensitive chaperone. It's precursor undergoes a cleavage of a C-terminal peptide and subsequent activation of protease activity in response to oxidative stress. The amino acid replace at 166 (L → P) reduces PARK7 protein stability and leads to increased degradation. The predicted MW of this protein is 20 kDa, An additional 25 kDa band can be observed due to modification (PMID: 31767755).

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

*** 20ul sizes contain 0.1% BSA

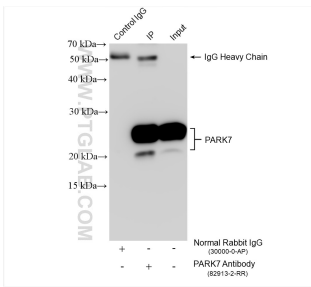
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

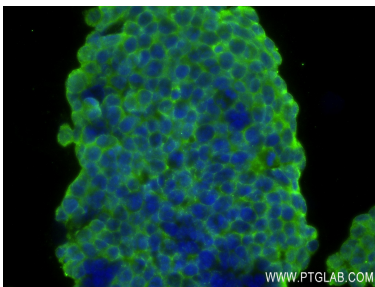
E: proteintech@ptglab.com
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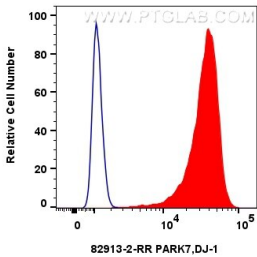
Selected Validation Data



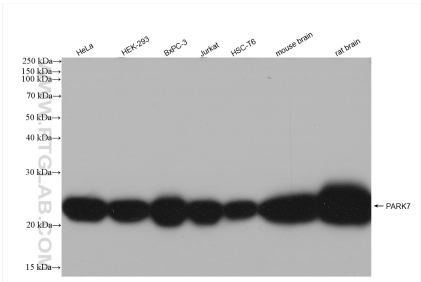
IP result of anti-PARK7/DJ-1 (IP:82913-2-RR, 4ug; Detection:82913-2-RR 1:2000) with HeLa cells lysate 1280 ug.



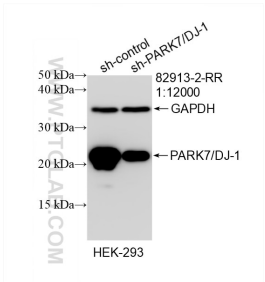
Immunofluorescent analysis of (4% PFA) fixed SH-SY5Y cells using PARK7/DJ-1 antibody (82913-2-RR, Clone: 230124B7) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



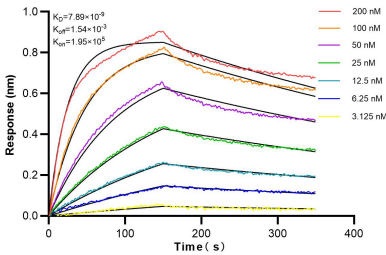
1x10⁶ HeLa cells were intracellularly stained with 0.25 ug PARK7/DJ-1 Recombinant antibody (82913-2-RR, Clone:230124B7) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Various lysates were subjected to SDS PAGE followed by western blot with 82913-2-RR (PARK7/DJ-1) antibody at dilution of 1:5000 incubated at room temperature for 1.5 hours.



WB result of PARK7/DJ-1 antibody (82913-2-RR; 1:12000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PARK7/DJ-1 transfected HEK-293 cells.



Bi-layer interferometry (BLI) kinetic assays of 82913-2-RR against Human PARK7/DJ-1 were performed. The affinity constant is 7.89 nM.