For Research Use Only

PARK7/DJ-1 Recombinant antibody, PBS Only

Catalog Number:82913-2-PBS Featured Product

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Basic Information

Catalog Number:
82913-2-PBS

Size:
100ug , Concentration: 1 mg/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

Applications

Tested Applications:
WB, IF/ICC, FC (Intra), IP, Indirect ELISA

Species Specificity:
human, mouse, rat

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 -80°C.
Storage Buffer:
PBS Only

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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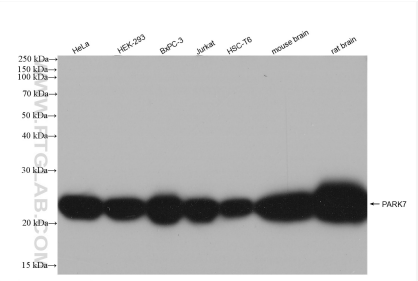
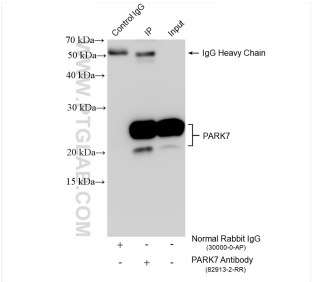
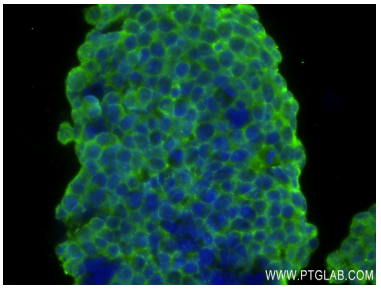
Selected Validation Data



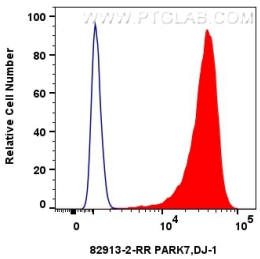
Various lysates were subjected to SDS PAGE followed by western blot with 82913-2-RR (PARK7/DJ-1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82913-2-PBS in a different storage buffer formulation.



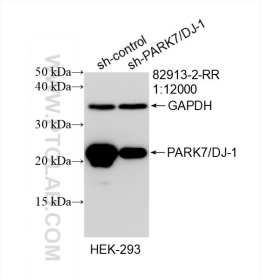
IP result of anti-PARK7/DJ-1 (IP:82913-2-RR, 4ug; Detection:82913-2-RR 1:2000) with HeLa cells lysate 1280 ug. This data was developed using the same antibody clone with 82913-2-PBS in a different storage buffer formulation.



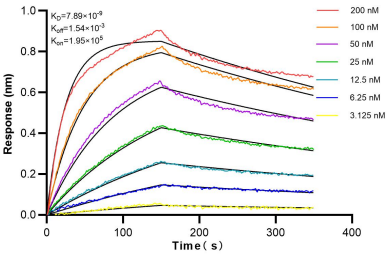
Immunofluorescent analysis of (4% PFA) fixed SH-SY5Y cells using PARK7/DJ-1 antibody (82913-2-RR, Clone: 230124B7) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 82913-2-PBS in a different storage buffer formulation.



1x10^6 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). This data was developed using the same antibody clone with 82913-2-PBS in a different storage buffer formulation.



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. This data was developed using the same antibody clone with 82913-2-PBS in a different storage buffer formulation.



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