

For Research Use Only

# PARK7/DJ-1 Recombinant antibody, PBS Only (Capture)



Catalog Number: 82913-1-PBS

## Basic Information

<b>Catalog Number:</b> 82913-1-PBS	<b>GenBank Accession Number:</b> BC008188	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1 mg/ml	<b>GeneID (NCBI):</b> 11315	<b>CloneNo.:</b> 230124E12
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q99497	
<b>Isotype:</b> IgG	<b>Full Name:</b> Parkinson disease (autosomal recessive, early onset) 7	
<b>Immunogen Catalog Number:</b> AG2287	<b>Calculated MW:</b> 189 aa, 20 kDa	

## Applications

**Tested Applications:**  
WB, IF/ICC, FC (Intra), IP, Sandwich ELISA, Indirect  
ELISA, Sample test

**Species Specificity:**  
human

## 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. Its 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.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
PBS Only

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

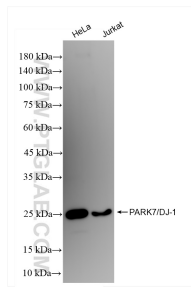
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

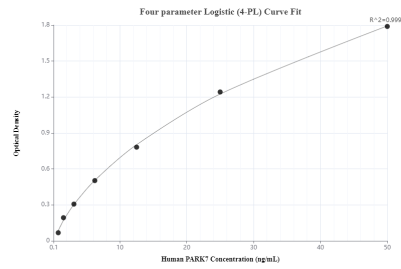
W: [ptgcn.com](http://ptgcn.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

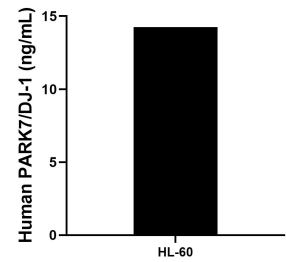
## Selected Validation Data



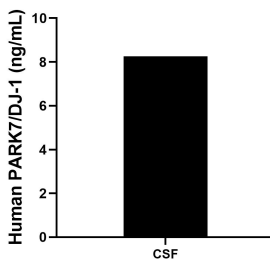
Various lysates were subjected to SDS PAGE followed by western blot with 82913-1-RR (PARK7/DJ-1 antibody) at dilution of 1:18000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82913-1-PBS in a different storage buffer formulation.



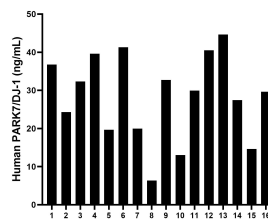
Sandwich ELISA standard curve of MP80004-1, Human PARK7/DJ-1 Monoclonal Matched Antibody Pair - PBS only. 82913-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag2287. 68802-1-PBS was HRP conjugated as the detection antibody. Range: 0.39-25 ng/mL.



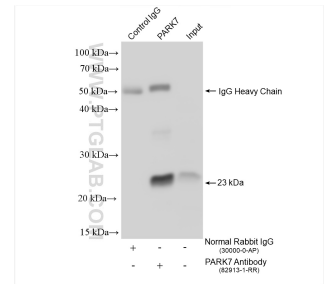
The mean human PARK7/DJ-1 concentration was determined to be 14.25 ng/mL in HL-60 cell extract based on a 4.3 mg/mL extract load.



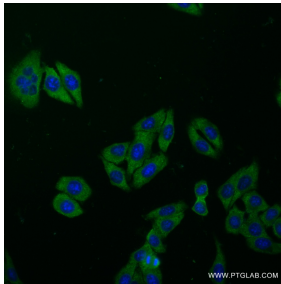
The human PARK7/DJ-1 concentration of Human cerebrospinal fluid (CSF) samples were determined to be 8.3 ng/mL.



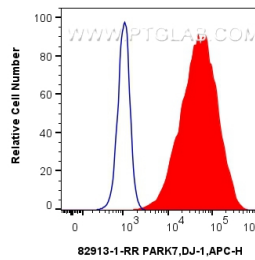
Serum of sixteen individual healthy human donors were measured. The human PARK7/DJ-1 concentration of detected samples was determined to be 28.3 ng/mL with a range of 6.3 - 44.6 ng/mL.



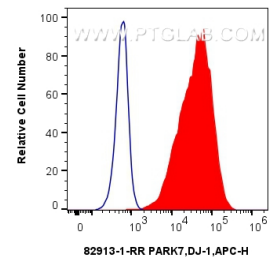
IP result of anti-PARK7/DJ-1 (IP:82913-1-RR, 4ug; Detection:82913-1-RR 1:2000) with HeLa cells lysate 1920 ug. This data was developed using the same antibody clone with 82913-1-PBS in a different storage buffer formulation.



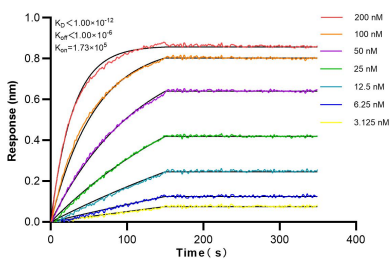
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using PARK7/DJ-1 antibody (82913-1-RR, Clone: 230124E12) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 82913-1-PBS in a different storage buffer formulation.



1x10<sup>6</sup> HeLa cells were intracellularly stained with 0.25 ug Anti-Human PARK7/DJ-1 (82913-1-RR, Clone:230124E12) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:166 (red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP, Clone: ) (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 82913-1-PBS in a different storage buffer formulation.



1x10<sup>6</sup> HepG2 cells were intracellularly stained with 0.2 ug Anti-Human PARK7/DJ-1 (82913-1-RR, Clone:230124E12) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:166 (red), or 0.2 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP, Clone: ) (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 82913-1-PBS in a different storage buffer formulation.



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