## For Research Use Only

## PARK7/DJ-1 Monoclonal antibody

Catalog Number: 68915-6-Ig



**Basic Information** 

 Catalog Number:
 GenBank Accession Number:

 68915-6-Ig
 BC008188

 Concentration:
 GeneID (NCBI):

 1000 ug/ml
 11315

 Source:
 UNIPROT ID:

 Mouse
 Q99497

Isotype: Full Name:
IgG1 Parkinson disease (autosomal

Immunogen Catalog Number:

Immunogen Catalog Number:

AG28526

Calculated MW: 189 aa, 20 kDa

> Observed MW: 20-25 kDa

recessive, early onset) 7

Purification Method:

Protein A purification

CloneNo.: 4G4E7

Recommended Dilutions:

Recommended Dilution WB 1:2000-1:20000

**Applications** 

Tested Applications:
WB, FC (Intra), ELISA
Species Specificity:

human, mouse, rat, pig, rabbit

**Positive Controls:** 

WB: HeLa cells, pig brain tissue, HEK-293 cells, Jurkat cells, PC-12 cells, rabbit brain tissue, rat brain tissue,

mouse brain tissue

## **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

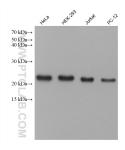
Storage:

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

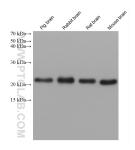
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

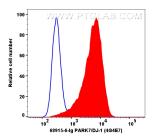
## Selected Validation Data



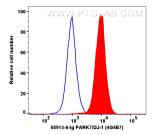
Various lysates were subjected to SDS PAGE followed by western blot with 68915-6-1g (PARK7/DJ-1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



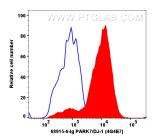
Various lysates were subjected to SDS PAGE followed by western blot with 68915-6-lg (PARK7/DJ-1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



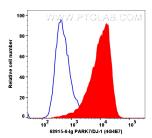
1x10^6 SKOV-3 cells were intracellularly stained with 0.2  $\mu$  g PARK7/DJ-1 Monoclonal antibody (68915-6-Ig, Clone: 4G4E7, red) and CoraLite® Plus 647-Goat Anti-Mouse Recombinant Secondary Antibody (H+L)(Cat.NO.RGAM005). Mouse IgG1 isotype control (66360-1-Ig, Clone: 1F8D3, blue) was parallel stained as control. Cells were fixed with 4% PFA.



1x10^6 HeLa cells were intracellularly stained with 0.2  $\,\mu$  g PARK7/DJ-1 Monoclonal antibody (68915-6-Ig, Clone: 4G4E7, red) and CoraLite® Plus 647-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO.RGAM005). Mouse IgG1 isotype control (66360-1-Ig, Clone: 1F8D3, blue) was parallel stained as control. Cells were fixed with 4% PFA.



1x10^6 Jurkat cells were intracellularly stained with 0.2  $\mu$  g PAR(7/DJ-1 Monoclonal antibody (68915-6-Ig, Clone: 4G4E7, red) and CoraLite® Plus 647-Goat Anti-Mouse Recombinant Secondary Antibody (H+L)(Cat.NO.RGAM005). Mouse IgG1 isotype control (66360-1-Ig, Clone: 1F8D3, blue) was parallel stained as control. Cells were fixed with 4% PFA.



1x10^6 Raji cells were intracellularly stained with 0.2  $\mu$  g PARK7/DJ-1 Monoclonal antibody (68915-6-Ig, Clone: 4G4E7, red) and CoraLite® Plus 647-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO.RGAM005). Mouse IgG1 isotype control (66360-1-Ig, Clone: 1F8D3, blue) was parallel stained as control. Cells were fixed with 4% PFA.