For Research Use Only

## PARK7/DJ-1 Recombinant antibody, PBS Only



**Purification Method:** 

Protein A purification

CloneNo.:

230124B7

Catalog Number:82913-2-PBS

**Basic Information** 

Catalog Number:

82913-2-PBS Size:

1 mg/ml Source: Rabbit Isotype:

Immunogen Catalog Number:

AG2287

189 aa, 20 kDa Observed MW: 25 kDa

Calculated MW:

BC008188

11315

Q99497 Full Name:

GeneID (NCBI):

**UNIPROT ID:** 

GenBank Accession Number:

Parkinson disease (autosomal recessive, early onset) 7

**Tested Applications:** Indirect ELISA, WB

Species Specificity: rat, mouse, human

**Applications** 

## **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).

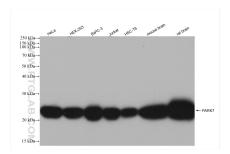
Storage

Storage:

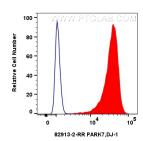
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C Storage Buffer:

PBS Only

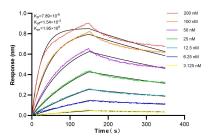
## **Selected Validation Data**



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.



tx10^6 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.



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