## For Research Use Only

## PARK7/DJ-1 Monoclonal antibody

Catalog Number: 68915-1-Ig



**Basic Information** 

Catalog Number:

GenBank Accession Number:

**Purification Method:** 

68915-1-lg

Protein G purification

BC008188 GeneID (NCBI):

CloneNo.:

WB 1:2000-1:10000

150ul , Concentration: 500  $\mu$ g/ml by 11315

4E10B2

Nanodrop:

**UNIPROT ID:** Q99497

Recommended Dilutions:

Mouse

lgG1

AG28526

Full Name:

Isotype:

Parkinson disease (autosomal

recessive, early onset) 7

Immunogen Catalog Number:

Calculated MW:

189 aa, 20 kDa

Observed MW: 20-25 kDa

**Applications** 

**Tested Applications:** 

WB, ELISA

Positive Controls: WB: HeLa cells, pig brain tissue, HEK-293 cells, Jurkat

Species Specificity:

human, pig, rabbit

cells, rabbit 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 Cterminal peptide and subsequent activation of protease activity in response to oxidative stress. The amino acid replace at 166 (L  $\rightarrow$  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

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

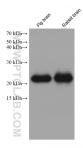
Storage Buffer:

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

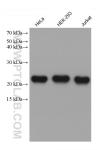
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

## **Selected Validation Data**



Various lysates were subjected to SDS PAGE followed by western blot with 68915-1-1g (PARK7/DJ-1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



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