For Research Use Only

PARK7/DJ-1 Recombinant antibody

Catalog Number:82913-3-RR



Basic Information

Catalog Number:

82913-3-RR

Size: 1000 µg/ml Source: Rabbit

Isotype:

Immunogen Catalog Number:

AG2287

Calculated MW:

189 aa, 20 kDa Observed MW: 20 kDa

GenBank Accession Number:

Parkinson disease (autosomal recessive, early onset) 7

BC008188

11315

Q99497

GeneID (NCBI):

UNIPROT ID:

Full Name:

Purification Method:

Protein A purfication

CloneNo.: 230124B3

Recommended Dilutions: WB 1:5000-1:50000

Applications

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

Positive Controls:

WB: HeLa cells, HEK-293 cells, BxPC-3 cells, Jurkat

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).

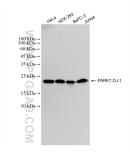
Storage

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

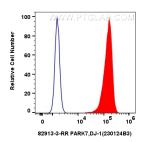
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

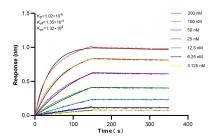
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 82913-3-RR (PARK7/DJ-1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



1x10^6 HeLa cells were intracellularly stained with 0.25 ug PARK(7/D)-1 Recombinant antibody (82913-3-RR, Clone:230124B3) 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).



Biolayer interferometry (BLL) kinetic assays of 82913-3-RR against Human PARK7/DJ-1 were performed. The affinity constant is 1.02 nM.