For Research Use Only

CoraLite® Plus 488-conjugated PARK7/DJ-1 Recombinant antibody

Catalog Number: CL488-82913-2



Basic Information

Catalog Number: GenBank Accession Number:

CL488-82913-2 BC008188 GeneID (NCBI):

100ul , Concentration: 1000 $\mu g/ml$ by 11315 Nanodrop: **UNIPROT ID:** Q99497 Rabbit Full Name:

Isotype: Parkinson disease (autosomal recessive, early onset) 7 IgG

Immunogen Catalog Number: Calculated MW: 189 aa, 20 kDa AG2287

> Observed MW: 25 kDa

Purification Method:

Protein A purification

CloneNo.: 230124B7

Recommended Dilutions: IF/ICC 1:50-1:500

Excitation/Emission maxima

wavelengths: 493 nm / 522 nm

Applications

Tested Applications:

Species Specificity: human, mouse, rat

Positive Controls:

IF/ICC: HepG2 cells,

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).

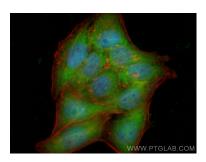
Storage

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using Coralite® Plus 488 PARK7/DJ-1 antibody (CL488-82913-2, Clone: 230124B7) at dilution of 1:200, CL594-Phalloidin (red).