Mouse monoclonal antibody to DJ-1 [PARK7]: IgG

Catalogue No.:	M-1573-100
Description:	Protein DJ-1 has many roles including protecting cells against oxidative stress and cell death (Ref: SwissProt). Mutations in the DJ-1 gene have been associated with rare forms of autosomal recessive early-onset Parkinson's disease.
Batch No.:	See product label
Unit size:	100 µg
Antigen:	Full length recombinant human DJ-1 expressed in and purified from E. coli.
Antibody Type:	monoclonal
Isotype:	IgG1/kappa
Clone:	4H4
Other Names:	Oncogene DJ1; Parkinson disease protein 7; PARK7; DJ-1
Accession:	Q99497 PARK7_HUMAN;
Produced in:	Mouse
Applications:	WB, IHC/IF. Suggested dilution of at least 1:1,000 for IHC/IF. Dilutions of 1:10,000 or lower is recommended for WB. This antibody reveals a prominent ~21 kDa band and stains mainly in cytoplasm of tissue culture cells. Biosensis recommends optimal dilutions/concentrations should be determined by the end user.
Specificity:	The antibody reacts with a 21 kDa band by Western blot on whole HeLa cell lysate. It has also been used successfully for immunocytochemistry.
Species Against:	Human, Mouse, Bovine
Antibody Against:	DJ1 [PARK7]
Form:	Lyophilized from PBS. Contains 5% trehalose.
Appearance:	White powder
Reconstitution:	Reconstitute in sterile distilled water. Centrifuge to remove any insoluble material.
Storage:	After reconstitution of lyophilised antibody, aliquot and store at -20°C for a higher stability. Avoid freeze-thaw cycles.
Expiry Date:	12 months after purchase

General References:

1. Nagakubo D, Taira T, Kitaura H, Ikeda M, Tamai K, Iguchi-Ariga SM and Ariga H DJ-1, a novel oncogene which transforms mouse NIH3T3 cells in cooperation with ras. Biochem. Biophys. Res. Commun. 231, 509–513 (1997).

2. Bonifati V, Rizzu P, van Baren, M.J., Schaap O, Breedveld GJ, Krieger E, Dekker MC, Squitieri F, Ibanez P, Joosse M et al. Mutations in the DJ-1 gene associated with autosomal recessive early-onset Parkinsonism. Science, 299, 256–259 (2003).

3. Xu J, Zhong N, Wang H, Elias JE, Kim CY, Woldman I, Pifl C, Gygi SP, Geula C, Yankner BA. The Parkinson's disease-associated DJ-1 protein is a transcriptional co-activator that

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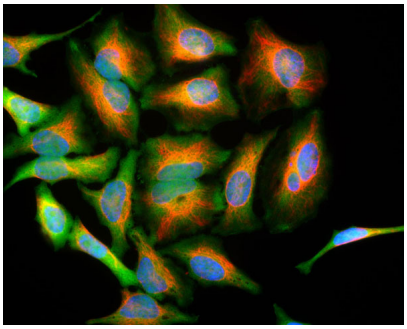
protects against neuronal apoptosis. Hum Mol Genet. 14 (9):1231-41 (2005).

4. Yokota T, Sugawara K, Ito K, Takahashi R, Ariga H. And Mizusawa, H. Down regulation of DJ-1 enhances cell death by oxidative stress, ER stress, and proteasome inhibition. Biochem. Biophys. Res. Commun., 312, 1342–1348 (2003).

5. Taira T, Saito Y, Niki T, Iguchi-Ariga SM, Takahashi K and Ariga H. DJ-1 has a role in antioxidative stress to prevent cell death. EMBO Rep., 5, 213–218 (2004).

6. Bonifati V, Oostra BA. and Heutink, P. Linking DJ-1 to neurodegeneration offers novel insights for understanding the pathogenesis of Parkinson's disease. J.Mol,Med.82,163-174 (2004).



HeLa cells stained with Mouse monoclonal antibody to DJ-1 M-1573-100 (green), and Chicken polyclonal antibody to Vimentin C-1409-50 (red) and DNA (blue). M-1573-100 antibody reveals strong cytoplasmic staining for DJ-1.

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