

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 ug
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, ICC. Suggested dilution of at least 1:500 for ICC. Dilutions of 1:5,000 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.
Antibody Against:	DJ1 [PARK7]
Cross-reactivity:	Does not react with rat and mouse DJ-1 protein on western blots.
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 -20C for a higher stability. Avoid freeze-thaw cycles.
Expiry Date:	12 months after purchase
General References:	<ol style="list-style-type: none">1. Nagakubo D, Taira T, Kitaura H, Ikeda M, Tamai K, Iguchi-Arigo SM and Ariga H DJ-1, a novel oncogene which transforms mouse NIH3T3 cells in cooperation with ras. <i>Biochem. Biophys. Res. Commun.</i> 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, Joesse M et al. Mutations in the DJ-1 gene associated with autosomal recessive early-onset Parkinsonism. <i>Science</i>, 299, 256–259 (2003).3. Xu J, Zhong N, Wang H, Elias JE, Kim CY, Woldman I, Pifl C, Gygi SP, Geula C, Yankner

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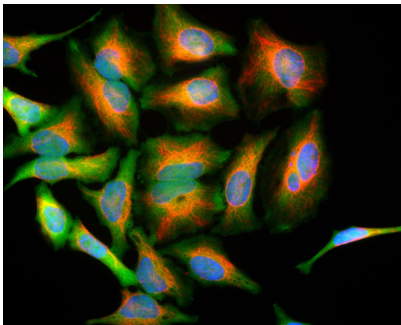
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BA. The Parkinson's disease-associated DJ-1 protein is a transcriptional co-activator that protects against neuronal apoptosis. *Hum Mol Genet.* 14 (9):1231-41 (2005).

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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