

Datasheet: HCA024

BATCH NUMBER 1610

Description:	HUMAN ANTI HUMAN DJ-1 (OXIDIZED AT C106)
Specificity:	DJ-1 (OXIDIZED AT C106)
Other names:	PARK7
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD03055
Isotype:	HuCAL Fab bivalent
Quantity:	0.1 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting (1)	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

(1)Detection via the Histidine Tag is recommended for Western Blotting applications. Bio-Rad suggest product [MCA5995P](#) for this purpose

Target Species	Human
Product Form	A bivalent human recombinant Fab (lambda light chain) selected from the HuCAL® GOLD phage display library. Expressed in <i>E. coli</i> and purified using NiNTA affinity chromatography. This Fab fragment is dimerized via a helix-turn-helix motif. The antibody is tagged with a myc-tag (EQKLISEEDL) and a his-tag (HHHHHH) at the C-terminus of the antibody heavy chain.
Preparation	Metal chelate affinity chromatography

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.01% Thiomersal
Approx. Protein Concentrations	Antibody concentration 0.5 mg/ml
Immunogen	DJ-1 peptide oxidized at C106 (sequence LIAAIC(SO3)AGPTA).
External Database Links	<p>UniProt: Q99497 Related reagents</p> <p>Entrez Gene: 11315 PARK7 Related reagents</p>
RRID	AB_2160114
Specificity	Human anti Human DJ-1 antibody, clone AbD03055 recognizes the human DJ-1 oncogene only when it is oxidized on cysteine C106. DJ-1 plays roles in transcriptional regulation and reaction to anti-oxidative stress. The oxidation status of DJ-1, particularly at C106, modulates the function of DJ-1 (Canet-Avilés et al. 2004). De-regulation of DJ-1 oxidation appears to be connected to the onset of conditions such as Parkinson's Disease (Abou-Sleiman et al. 2003).
References	<ol style="list-style-type: none"> Ooe, H. <i>et al.</i> (2006) Establishment of specific antibodies that recognize C106-oxidized DJ-1. Neurosci Lett. 404 (1-2): 166-9. Shadrach KG <i>et al.</i> (2013) DJ-1-dependent regulation of oxidative stress in the retinal pigment epithelium (RPE). PLoS One. 8 (7): e67983. Andres-Mateos, E. <i>et al.</i> (2007) DJ-1 gene deletion reveals that DJ-1 is an atypical peroxiredoxin-like peroxidase. Proc Natl Acad Sci U S A. 104 (37): 14807-12. Bitar, M.S. <i>et al.</i> (2012) Decline in DJ-1 and decreased nuclear translocation of Nrf2 in Fuchs endothelial corneal dystrophy. Invest Ophthalmol Vis Sci. 53 (9): 5806-13. Zhang C <i>et al.</i> (2008) Role of NonO-histone interaction in TNFalpha-suppressed prolyl-4-hydroxylase alpha1. Biochim Biophys Acta. 1783 (8): 1517-28. Kim, J. <i>et al.</i> (2015) DJ-1 protects against undernutrition-induced atrophy through inhibition of the MAPK-ubiquitin ligase pathway in myoblasts. Life Sci. 143: 50-7.
Storage	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
Guarantee	12 months from date of despatch
Acknowledgements	Sold under license of U.S. Patents 6753136, 7785859 and 8273688 and corresponding patents.

By purchasing this product, you agree that your Name and Affiliation will be sent to Dr. Ariga, Hokkaido University, who first published this antibody in the journal Neuroscience Letters (Vol. 404, pp.166-169, 2006). His-tag is a registered trademark of EMD Biosciences.

Health And Safety Information	Material Safety Datasheet documentation #10094 available at: https://www.bio-rad-antibodies.com/SDS/HCA024 10094
Licensed Use	For in vitro research purposes only, unless otherwise specified in writing by Bio-Rad.
Regulatory	For research purposes only
Technical Advice	Recommended protocols and further information about HuCAL recombinant antibody technology can be found in the HuCAL Antibodies Technical Manual

Related Products

Recommended Secondary Antibodies

Mouse Anti Synthetic Peptide HISTIDINE TAG (MCA5995...) [HRP](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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