

## Datasheet: HCA024

<b>Description:</b>	HUMAN ANTI HUMAN DJ-1 (OXIDIZED AT C106)
<b>Specificity:</b>	DJ-1 (OXIDIZED AT C106)
<b>Other names:</b>	PARK7
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AbD03055
<b>Isotype:</b>	HuCAL Fab bivalent
<b>Quantity:</b>	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](http://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**

<b>Target Species</b>	Human
<b>Product Form</b>	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.
<b>Preparation</b>	Metal chelate affinity chromatography
<b>Source</b>	E.coli

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	Antibody concentration 0.5 mg/ml
<b>Immunogen</b>	DJ-1 peptide oxidized at C106 (sequence LIAAIC(SO <sub>3</sub> )AGPTA).
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q99497</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">11315</a>    PARK7    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_2160114
<b>Specificity</b>	<p><b>Human anti Human DJ-1 antibody, clone AbD03055</b> 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 (<a href="#">Canet-Avilés et al. 2004</a>). De-regulation of DJ-1 oxidation appears to be connected to the onset of conditions such as Parkinson's Disease (<a href="#">Abou-Sleiman et al. 2003</a>).</p>
<b>References</b>	<ol style="list-style-type: none"> <li>Andres-Mateos, E. <i>et al.</i> (2007) DJ-1 gene deletion reveals that DJ-1 is an atypical peroxiredoxin-like peroxidase. <a href="#">Proc Natl Acad Sci U S A. 104 (37): 14807-12.</a></li> <li>Zhang C <i>et al.</i> (2008) Role of NonO-histone interaction in TNFalpha-suppressed prolyl-4-hydroxylase alpha1. <a href="#">Biochim Biophys Acta. 1783 (8): 1517-28.</a></li> <li>Bitar, M.S. <i>et al.</i> (2012) Decline in DJ-1 and decreased nuclear translocation of Nrf2 in Fuchs endothelial corneal dystrophy. <a href="#">Invest Ophthalmol Vis Sci. 53 (9): 5806-13.</a></li> <li>Shadrach KG <i>et al.</i> (2013) DJ-1-dependent regulation of oxidative stress in the retinal pigment epithelium (RPE). <a href="#">PLoS One. 8 (7): e67983.</a></li> <li>Kim, J. <i>et al.</i> (2015) DJ-1 protects against undernutrition-induced atrophy through inhibition of the MAPK-ubiquitin ligase pathway in myoblasts. <a href="#">Life Sci. 143: 50-7.</a></li> </ol>
<b>Storage</b>	<p>This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	This product and/or its use is covered by claims of U.S. patents, and/or pending U.S. and non-U.S. patent applications owned by or under license to Bio-Rad Laboratories, Inc. See <a href="http://bio-rad.com/en-us/trademarks">bio-rad.com/en-us/trademarks</a> for details.

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.

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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/HCA024">https://www.bio-rad-antibodies.com/SDS/HCA024</a> 10040
<b>Licensed Use</b>	For <i>in vitro</i> . research purposes only, unless otherwise specified in writing by Bio-Rad.
<b>Regulatory</b>	For research purposes only
<b>Technical Advice</b>	Recommended protocols and further information about HuCAL recombinant antibody technology can be found in the <a href="#">HuCAL Antibodies Technical Manual</a> .

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## Related Products

### Recommended Secondary Antibodies

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

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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://bio-rad-antibodies.com/datasheets)  
'M420807:230706'

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