

Datasheet: MCA2577

**BATCH NUMBER 1602**

<b>Description:</b>	MOUSE ANTI RHIZOPUS ARRHIZUS
<b>Specificity:</b>	RHIZOPUS ARRHIZUS
<b>Other names:</b>	RHIZOPUS ORYZAE
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	WSSA-RA-1
<b>Isotype:</b>	IgM
<b>Quantity:</b>	0.25 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
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin (1)	▪			1/50
ELISA	▪			
Immunoprecipitation		▪		
Western Blotting	▪			

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) **This product requires protein digestion pre-treatment of paraffin sections e.g. See [Jensen et al. \(2000\)](#) for details.**

<b>Target Species</b>	Fungal
<b>Product Form</b>	Purified IgM - liquid
<b>Preparation</b>	Purified IgM prepared by ammonium sulphate precipitation from tissue culture supernatant.
<b>Buffer Solution</b>	Phosphate buffered saline.

<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgM concentration 1.0mg/ml.
<b>Immunogen</b>	Water-soluble somatic antigens (WSSA) from <i>Rhizopus arrhizus</i> .
<b>RRID</b>	AB_1102839
<b>Fusion Partners</b>	Spleen cells from immunised Balb/c ABom mice were fused with cells of the X63-Ag8.653 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti <i>Rhizopus arrhizus</i> antibody, clone WSSA-RA-1</b> recognizes <i>Rhizopus arrhizus</i> and other members of the family Mucoraceae including <i>Absidia corymbifera</i> and <i>Rhizomucor pusillus</i>, reacting strongly with the cytoplasm of hyphae and also possibly with the walls and septae, where present.</p> <p><i>R. arrhizus</i>, an angio-invasive filamentous fungus, is one of the main causative agents of systemic bovine and human zygomycosis, a worldwide and often fatal respiratory disease. Clone WSSA-RA-1 has been successfully used in immunohistochemistry for the specific and consistent <i>in situ</i> diagnosis of systemic bovine zygomycosis, attributed to its possible binding to a highly glycosylated moiety on non-structural components.</p> <p>Clone WSSA-RA-1 does not bind to water-soluble somatic antigens (WSSA) of <i>Aspergillus spp.</i></p>
<b>Histology Positive Control Tissue</b>	Lymph nodes from <i>R. arrhizus</i> infected cattle.
<b>Western Blotting</b>	Mouse anti <i>Rhizopus arrhizus</i> detects a number diffuse band/s of between ~14-110kDa of <i>Rhizopus arrhizus</i> water-soluble somatic antigens ( <a href="#">Jensen et al. 1996</a> ).
<b>References</b>	<ol style="list-style-type: none"> <li>Jensen, H.E. <i>et al.</i> (1996) Immunohistochemical diagnosis of systemic bovine zygomycosis by murine monoclonal antibodies. <a href="#">Vet Pathol. 33 (2): 176-83.</a></li> <li>Jensen, H.E. <i>et al.</i> (1996) Diagnosis of systemic mycoses by specific immunohistochemical tests. <a href="#">APMIS. 104 (4): 241-58.</a></li> <li>Jensen, H.E. <i>et al.</i> (1997) The use of immunohistochemistry to improve sensitivity and specificity in the diagnosis of systemic mycoses in patients with haematological malignancies. <a href="#">J Pathol. 181 (1): 100-5.</a></li> <li>Jensen, H.E. <i>et al.</i> (1996) Development of murine monoclonal antibodies for the immunohistochemical diagnosis of systemic bovine aspergillosis. <a href="#">J Vet Diagn Invest. 8 (1): 68-75.</a></li> <li>Arendrup, M.C. <i>et al.</i> (2009) Breakthrough <i>Aspergillus fumigatus</i> and <i>Candida albicans</i> double infection during caspofungin treatment: laboratory characteristics and implication for susceptibility testing. <a href="#">Antimicrob Agents Chemother. 53: 1185-93.</a></li> <li>Yasuda, M. <i>et al</i> (2012) A case of intestinal mucormycosis in a common marmoset (<i>Callithrix jacchus</i>). <a href="#">J Vet Med Sci. 74: 357-9.</a></li> <li>Galiza G.J.N. <i>et al.</i> (2014) Usage of three immunohistochemical methods in the</li> </ol>

detection of aspergillosis and zygomycosis in animals. [Pesquisa Veterinária Brasileira. 34 \(7\): 637-642.](#)

8. Suzuta F *et al.* (2015) Variations in the morphology of *Rhizomucor pusillus* in granulomatous lesions of a Magellanic penguin (*Spheniscus magellanicus*). [J Vet Med Sci. 77 \(8\): 1029-31.](#)

9. Nishimura, M. *et al.* (2014) Zygomycotic mediastinal lymphadenitis in beef cattle with ruminal tympany. [J Vet Med Sci. 76 \(1\): 123-7.](#)

10. Ogasawara, F. *et al.* (2016) Concurrent Fowlpox and Candidiasis Diseases in Backyard Chickens with Unusual Pox Lesions in the Bursa of Fabricius. [Avian Dis. 60 \(3\): 705-8.](#)

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<b>Storage</b>	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. 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.
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2577">https://www.bio-rad-antibodies.com/SDS/MCA2577</a> 10040
<b>Regulatory</b>	For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgM (STAR138...) [Alk. Phos.](#)

Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)

**North & South** Tel: +1 800 265 7376

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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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