

Datasheet: MCA2577

Description:	MOUSE ANTI RHIZOPUS ARRHIZUS
Specificity:	RHIZOPUS ARRHIZUS
Other names:	RHIZOPUS ORYZAE
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	WSSA-RA-1
Isotype:	IgM
Quantity:	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.

	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.**

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

Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgM concentration 1.0mg/ml.
Immunogen	Water-soluble somatic antigens (WSSA) from <i>Rhizopus arrhizus</i> .
RRID	AB_1102839
Fusion Partners	Spleen cells from immunised Balb/c ABom mice were fused with cells of the X63-Ag8.653 myeloma cell line.
Specificity	<p>Mouse anti <i>Rhizopus arrhizus</i> antibody, clone WSSA-RA-1 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>
Histology Positive Control Tissue	Lymph nodes from <i>R. arrhizus</i> infected cattle.
Western Blotting	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 (Jensen et al. 1996).
References	<ol style="list-style-type: none"> Jensen, H.E. <i>et al.</i> (1996) Immunohistochemical diagnosis of systemic bovine zygomycosis by murine monoclonal antibodies. Vet Pathol. 33 (2): 176-83. Jensen, H.E. <i>et al.</i> (1996) Diagnosis of systemic mycoses by specific immunohistochemical tests. APMIS. 104 (4): 241-58. 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. J Pathol. 181 (1): 100-5. Jensen, H.E. <i>et al.</i> (1996) Development of murine monoclonal antibodies for the immunohistochemical diagnosis of systemic bovine aspergillosis. J Vet Diagn Invest. 8 (1): 68-75. 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. Antimicrob Agents Chemother. 53: 1185-93. Yasuda, M. <i>et al</i> (2012) A case of intestinal mucormycosis in a common marmoset (<i>Callithrix jacchus</i>). J Vet Med Sci. 74: 357-9. Galiza G.J.N. <i>et al.</i> (2014) Usage of three immunohistochemical methods in the

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

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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.](#)

11. Haridy, M. *et al.* (2018) *Candida parapsilosis*. and *Candida tropicalis*. infections in an Okhotsk snailfish (*Liparis ochotensis*.). [J Vet Med Sci. 80 \(11\): 1676-1680.](#)

Storage

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.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

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

Human Anti Mouse IgM (HCA040...) [FITC](#)

Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [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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