

Datasheet: MCA2576

Description:	MOUSE ANTI ASPERGILLUS SPP
Specificity:	ASPERGILLUS SPP
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	WF-AF-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)	▪			1/300
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 sulfate precipitation from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein	IgM concentration 1.0 mg/ml

Concentrations

Immunogen Wall fraction (WF) of *Aspergillus fumigatus*

RRID AB_1100465

Fusion Partners Spleen cells from immunized Balb/c ABom mice were fused with cells of the X63-Ag8.653 myeloma cell line.

Specificity **Mouse anti *Aspergillus spp.*, clone WF-AF-1**, is raised against the wall fraction (WF) of *Aspergillus fumigatus*. This antibody specifically recognizes members of the *Aspergillus spp.* including *A. flavus* and *A. niger*, reacting strongly with walls and septae, and to a lesser extent within the cytoplasm of hyphae.

A. fumigatus, a thermophilic, opportunistic and angio-invasive filamentous fungus, is the main causative agent of systemic bovine aspergillosis, a worldwide and often fatal respiratory disease of cattle. Clone WF-AF-1 has been successfully used in immunohistochemistry for the specific and consistent in situ diagnosis of bovine systemic aspergillosis, attributed to its binding to the major cell wall component, galactomannan. Clone WF-AF-1 has also been used for the identification of aspergillosis in human tissue sections.

Mouse anti *Aspergillus spp.*, clone WF-AF-1, does not bind to water-soluble somatic antigens (WSSA) of *Aspergillus spp.*, but may react with galactomannans of members of the genus *Penicillium*.

Histology Positive Control Tissue *Aspergillus* infected placenta.

Western Blotting Mouse anti *Aspergillus spp.* antibody, clone WF-AF-1 detects a band of approximately 106kDa of *Aspergillus fumigatus* wall fraction (WF).

- References**
1. Jensen, H.E. *et al.* (1996) Development of murine monoclonal antibodies for the immunohistochemical diagnosis of systemic bovine aspergillosis. [J Vet Diagn Invest. 8 \(1\): 68-75.](#)
 2. Jensen, H.E. *et al.* (1996) Diagnosis of systemic mycoses by specific immunohistochemical tests. [APMIS. 104 \(4\): 241-58.](#)
 3. Jensen, H.E. *et al.* (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.](#)
 4. Delaney, M.A. *et al.* (2013) Occlusive fungal tracheitis in 4 captive bottlenose dolphins (*Tursiops truncatus*). [Vet Pathol. 50 \(1\): 172-6.](#)
 5. Goodpaster, T. & Randolph-Habecker, J. (2014) A flexible mouse-on-mouse immunohistochemical staining technique adaptable to biotin-free reagents, immunofluorescence, and multiple antibody staining. [J Histochem Cytochem. 62 \(3\): 197-204.](#)
 6. Galiza Glauco J.N. *et al.* (2014) Usage of three immunohistochemical methods in the detection of aspergillosis and zygomycosis in animals [Pesquisa Veterinária Brasileira. 34](#)

(7): [637-642](#).

7. Murase, H. *et al.* (2015) A clinical case of equine fungal placentitis with reference to hormone profiles and ultrasonography. [J Equine Sci. 26 \(4\): 129-33](#).
8. Dagleish, M.P. *et al.* (2010) Immunohistochemical diagnosis of infectious diseases of sheep. [Small Ruminant Research. 92 \(1-3\): 19-35](#).
9. 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](#).
10. Jin, J-H. *et al.* (2015) Real-time selective monitoring of allergenic *Aspergillus* molds using pentameric antibody-immobilized single-walled carbon nanotube-field effect transistors [RSC Adv. 5 \(20\): 15728-15735](#).
11. 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](#).
12. 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](#).
13. Silva, R.A.F. *et al.* (2023) Cutaneous fungal infections secondary to avian pox in Northeast Brazil [Pesquisa Veterinária Brasileira. 43 8 Aug \[Epub ahead of print\]](#).

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: <https://www.bio-rad-antibodies.com/SDS/MCA2576>
10040

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

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

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

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