Datasheet: 2402-3007A488

Description:	MOUSE ANTI CRYPTOSPORIDIUM:Alexa Fluor® 488
Specificity:	CRYPTOSPORIDIUM
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	BEL 0126
Isotype:	IgG3
Quantity:	100 TESTS

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	▪			1/5 - 1/20

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.

Target Species

Protozoan

Product Form

Purified IgG conjugated to Alexa Fluor 488 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®488	495	519

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% sodium azide (NaN_3)
1% bovine serum albumin

Approx. Protein Concentrations

IgG concentration 0.05mg/ml

Immunogen

Purified *Cryptosporidium* oocysts from bovine faeces.

RRID	AB_844533
Specificity	**Mouse anti *Cryptosporidium* antibody, clone BEL 0126** recognizes a membrane antigen expressed by the oocysts of *Cryptosporidium* sp., an obligate enteric coccidian parasite of the phylum Apicomplexa that infects the gastrointestinal tract. The parasite is one of the most important enteric pathogens in both humans and animals (Rose *et al.* 2002). Since its first diagnosis in 1975 (Meisel *et al.* 1976), Cryptosporidiosis, has become one of the most prominent public health concerns worldwide (Rose *et al.* 2002). *Cryptosporidium* oocysts are resistant to chlorine and their small size makes removal by filtration difficult. Alternative methods have been developed such as UV and ozone treatment alongside monitoring using Immunofluorescence screening (Rose *et al.* 2002). Cryptosporidiosis is a disease affecting the intestines of mammals which is spread through the fecal-oral route. The main symptom of is self-limiting diarrhea in people with intact immune systems. However, in immunocompromised individuals, such as AIDS patients, infection can cause permanent & life-threatening diarrhea (Ma *et al.* 1984).
Flow Cytometry	Use 10µl of the suggested working dilution to label 1x10^6 cells in 100µl
References	1. Mansfield, K.G. *et al.* (1997) Identification of an Enterocytozoon bieneusi-like microsporidian parasite in simian-immunodeficiency-virus-inoculated macaques with hepatobiliary disease. Am J Pathol. 150: 1395-405. 2. Weigum, S.E. *et al.* (2016) Hollow silica microspheres for buoyancy-assisted separation of infectious pathogens from stool. J Chromatogr A. 1466: 29-36. 3. Luka, G. *et al.* (2019) Label-Free Capacitive Biosensor for Detection of *Cryptosporidium*. Sensors (Basel). 19 (2)Jan 10 [Epub ahead of print]. 4. Sonzogni-desautels, K. *et al.* (2019) A protocol to count *Cryptosporidium* oocysts by flow cytometry without antibody staining. PLoS Negl Trop Dis. 13 (3): e0007259. 5. Luka, G.S. *et al.* (2022) On-chip-based electrochemical biosensor for the sensitive and label-free detection of *Cryptosporidium.*. Sci Rep. 12 (1): 6957.
Further Reading	1. Meisel, J.L. *et al*. (1976) Overwhelming watery diarrhea associated with a cryptosporidium in an immunosuppressed patient. Gastroenterology. 70: 1156-60. 2. Rose, J.B. *et al*. (2002) Risk and control of waterborne cryptosporidiosis. FEMS Microbiol Rev. 26: 113-23. 3. Ma, P. (1984) Cryptosporidium and the enteropathy of immune deficiency. J Pediatr Gastroenterol Nutr. 3 (4): 488-90.
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. This product is photosensitive and should be protected from light.

Guarantee	12 months from date of despatch
Acknowledgements	This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/2402-3007A488 10041
Regulatory	For research purposes only

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