

Datasheet: 2402-3007F

Description:	MOUSE ANTI CRYPTOSPORIDIUM:FITC		
Specificity:	CRYPTOSPORIDIUM		
Format:	FITC		
Product Type:	Monoclonal Antibody		
Clone:	BEL 0126		
Isotype:	lgG3		
Quantity:	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 <a href="https://www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	-			1/5 - 1/50
Immunofluorescence				

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 Fluorescein Isothiocyanate Isomer 1 (FIT				
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)		
	FITC	490	525		
Preparation	Purified IgG prepared by affinity chromatography on Protein G				
Buffer Solution	Phosphate buffered saline				
Preservative	0.09% Sodium Azide (NaN <sub>3</sub> )				
Stabilisers	1% Bovine ser	um albumin			
Approx. Protein Concentrations	IgG concentration 0.1mg/ml				
Immunogen	Purified cryptosporidium oocysts from bovine faeces.				
0 15 1					

## **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 (<u>Rose et al. 2002</u>). 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).

FI	ow	Cvto	ometry
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Use 10ul of the suggested working dilution to label 1x10<sup>6</sup> cells in 100ul.

#### 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.

#### **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

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

## **Shelf Life**

18 months from date of despatch.

## **Health And Safety** Information

Material Safety Datasheet documentation #10041 available at:

10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf

### Regulatory

For research purposes only

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