Datasheet: MCA5978P

Description:	MOUSE ANTI FLAVOBACTERIUM PSYCHROPHILUM:HRP
Specificity:	FLAVOBACTERIUM PSYCHROPHILUM
Format:	HRP
Product Type:	Monoclonal Antibody
Clone:	FL43
Isotype:	IgG2b
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 www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
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.

Target Species	Bacterial
Product Form	Purified IgG conjugated to Horseradish Peroxidase (HRP) - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.01% Gentamicine sulphate 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 2.31 mg/ml
Immunogen	Outer membrane fractions of *F. psychrophilum* (wildtype strain CSF 259-95)
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the Mouse X63-Ag8.6.5.3 myeloma cell line.

Specificity	**Mouse anti *Flavobacterium psychrophilum*, clone FL43**, recognizes the infectious bacteria *Flavobacterium psychrophilum*, previously designated as *Cytophaga psychrophila* and *Flexibacter psychrophilus*. *F. pschrophillum* is the causative agent of fish disease known under a range names, most commonly as Bacterial cold water disease (BCWD) in America and Rainbow trout fry syndrome (RTFS) in Europe. *F. psychrophilum* has a worldwide distribution where it is responsible for serious disease outbreaks in predominantly freshwater salmonid fish farms and hatcheries resulting in significant ecconomic loss for the aquaculture industry. While *F. pyschrophilum* infections are primarily in young fish, with Rainbow trout and Coho salmon being particularly susceptable, salmonids of all ages are subject to infection. Additionally *F. pyschrophilum* has been detected in a range of non salmonids including species from eel, (*Anguilla sp.*), and carp (*Carassius sp.*) families (Barnes *et al.* 2011). While the route of infection is not fully understood, it is beleived that infection may in part be from parent to offspring, however it is known that *F. psychrophilum* survives outside its host in an aquatic environment for a considerable time period. Additionally other fish, both inter- and intraspecies can function as a reservoir for infection, particulary dying and dead individuals that have been demonstrated to shed increased levels of bacteria (Madetoja *et al.* 2000). Infection results in a range of clinical symptoms including necrosis of tissues in such as the fins, enlarged organs, in particular, the spleen, neurological damage and morphological deformities. Mortality varies widely from 10% to over 75% and it is believed that the variation in mortality may be affected by a combination of factors including, but not limited to, bacterial strain virulence, water temperature, genetic diversity within fish stocks and stress (Barnes *et al.* 2011). Clone FL43 has been shown to be specific for *F.psychrophilum* and does not recognise strains of the closely related *F. columnare, F. pectinovorum, F. aquatile, F. branchiophilum*, and *F. saccharophilumte* tested to date. Clone FL43 may therefore be used to identify *F. psycophilum* in tissues of infected individuals and may be of use in research to develop treatment regimes for farmed salmonid species (Lindstrom *et al.* 2009) .
References	1. Lindstrom, N. M, *et al.* (2009) A quantitative enzyme-linked immunosorbent assay and filtration-based fluorescent antibody test as potential tools to screen broodstock for infection with *Flavobacterium psychrophilum*. J Aquat Anim Health. 21: 43-56. 2. Gliniewicz, K. *et al.* (2012) Comparative proteomic analysis of virulent and rifampicin-attenuated *Flavobacterium psychrophilum*. *J Fish Dis. 35 (7): 529-39.*
Further Reading	1. Madetoja, J., *et al.* (2000) *Flavobacterium psychrophilum*, invasion into and shedding by rainbow trout *Oncorhynchus mykiss*. Int J Parasitol. 30: 321-6. 2. Barnes, M.E. *et al.* (2011) A Review of *Flavobacterium Psychrophilum* Biology, Clinical Signs, and Bacterial Cold Water Disease Prevention and Treatment. The Open Fish Science Journal 4: 40-8.
Storage	Store at +4^{o}C. DO NOT FREEZE. This product should be stored undiluted.
Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation available at: Material Safety Datasheet Documentation #10115 available at: https://www.bio-rad-antibodies.com/uploads/MSDS/10115.pdf
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

MOUSE ANTI SALMONID Ig (MCA2182)
RABBIT ANTI SALMONID Ig (AHP761)
MOUSE ANTI RAINBOW TROUT Ig (MCA5976)

North & South America
Tel: +1 800 265 7376
Fax: +1 919 878 3751
Email: antibody_sales_us@bio-rad.com

Worldwide
Tel: +44 (0)1865 852 700
Fax: +44 (0)1865 852 739
Email: antibody_sales_uk@bio-rad.com

Europe
Tel: +49 (0) 89 8090 95 21
Fax: +49 (0) 89 8090 95 50
Email: antibody_sales_de@bio-rad.com

'M258209:140620'

Printed on 06 Mar 2018