Product Name
Mouse Anti-Flavobacterium psychrophilum Fluorescein Isothiocyanate Conjugated Monoclonal Antibody

CAT No.
CC0116F

LOT No.
23609C

Quantity
100µg

orders@immunoprecise.com
www.immunoprecise.com

Applications
Immunofluorescence (IF)
See references for detailed applications of this antibody

Antibody Concentration / Working Dilution
0.73 mg/mL / use at 1/100 – 1/500

Source
Protein G purified from murine ascites fluid

Host/Isotype
Mouse, IgG2b

Clone Designation
FL43

Background
There is strong evidence that *Flavobacterium psychrophilum*, the etiologic agent of coldwater disease (CWD), is transmitted vertically and it has been hypothesized that disease management at hatchery facilities may be improved through broodstock screening and implementation of culling programs. FL43 was selected for assay development and shown to react with 67 *F.* 31 *psychrophilum* isolates tested, but did not react with two strains of *Flavobacterium columnare* or 32 one strain each of *F. pectinovorum*, *F. aquatile*, *F. branchiophilum*, and *F. saccharophilum*.

Species Cross Reactivity / Specificity
MAb FL43 exhibited specificity to *F. psychrophilum* isolates CSF 259-93 and ATCC 49418. No cross reactivity was observed with *F. columnare* GA-02 or ATCC 23463.

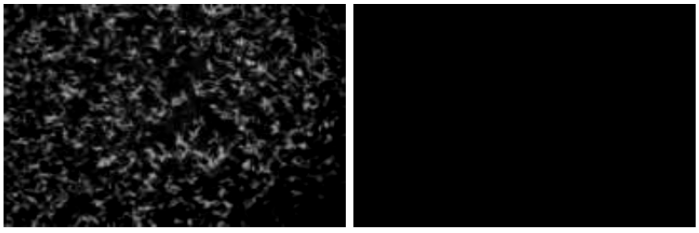
Formulation
Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer: 10 mg/mL Bovine Serum Albumin (BSA), IgG and Protease free
Preservative: 0.01% (w/v) Sodium Azide

Stability
+4˚C (do not freeze) stable 6 months after opening

Immunogen
Outer membrane fractions (OMF) of *F.* 116 *psychrophilum* CSF 259-93 were prepared following the method of Filip et al. (1973)

Sample Data - IF
Flavobacterium psychrophilum stained with MAb FL43 conjugated to AlexaFluor-488 and viewed on a glass slide. *F. columnare* and *F. pectinovorum* served as negative controls. The images were viewed with epifluorescent microscope housing a FITC filter. Photomicrographs are at 100x magnification.

F. psychrophilum *F. columnare*



References
Lindstrom, N. M., Call, D. R., House, M. L., Moffitt, C. M., and Cain, K. D. A quantitative enzyme-linked immunosorbent assay (ELISA) and filtration-based 1 fluorescent antibody test (FAT) as potential tools to screen broodstock for 2 Flavobacterium psychrophilum infection. Journal of Aquatic Animal Health 2009; 21: 43-56

Filip, C., Fletcher, G., Wulff, J.L. & Earhart, C.F. (1973). Solubilisation of the cytoplasmic membrane of *Escherichia coli* by the ionic detergent sodium-lauryl sarcosinate. Journal of Bacteriology 115, 717-722.

Product Name
Mouse Anti-Flavobacterium psychrophilum Fluorescein Isothiocyanate Conjugated Monoclonal Antibody

CAT No.
IPA116F

LOT No.
23609C

Quantity
100µg

ImmunoPrecise
orders@immunoprecise.com
www.immunoprecise.com

Fluorescent Antibody Test

* Bacteria should be grown in a broth culture and harvested during the exponential growth phase to ensure optimal results from this procedure.

1. Prepare a solution of PBS + 0.5% (w/v) non-fat dry milk (NFDM). You will need 100 µl per sample being processed.
2. Mix 100 µl of exponentially growing bacteria with 100 µl of PBS + NFDM in a 1.5 ml microcentrifuge tube.
3. Incubate the solution at room temperature for 15 minutes.
4. Dilute MAb FL-43:FITC 1:100 in PBS + NFDM. The amount of diluted antibody added to the sample will be equal to the total sample volume. For example, 200 µl of diluted antibody is mixed with 200 µl of sample (100 µl sample and 100 µl PBS).
5. Incubate the mixture in the dark at room temperature for 30 minutes.
6. Spin the culture at 3500 x *g* for 10 minutes.
7. Remove the supernatant and wash the pellet in an equal volume of PBS.
8. Repeat the spin and washing of the pellet 2 times. After the last spin, remove the supernatant and resuspend the pellet in 100 µl PBS.
9. Pipet 10 µl of the solution on to a slide and place a coverslip over it.
10. Slide should be analyzed immediately with an epifluorescence microscope equipped with a FITC filter.