Datasheet: MCA2182

Description: MOUSE ANTI SALMONID Ig

Specificity: Ig (SALMONID)

Format: Con S/N

Product Type: Monoclonal Antibody

Clone: 5F12

Isotype: IgG2a

Quantity: 0.5 ml

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.

<table>
<thead>
<tr>
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<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
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<tbody>
<tr>
<td>Flow Cytometry</td>
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<tr>
<td>Immunohistology - Frozen</td>
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<td>Immunohistology - Paraffin</td>
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<td>Immunohistology - Resin</td>
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<td>ELISA</td>
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<td>1/250 - 1/1000</td>
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<td>Immunoprecipitation</td>
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<tr>
<td>Western Blotting</td>
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<td>1/250 - 1/1000</td>
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<tr>
<td>Immunofluorescence</td>
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Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

Target Species

Fish

Product Form

Tissue Culture Supernatant - liquid (concentrated)

Preservative Stabilisers

0.09% Sodium Azide

Immunogen

Rainbow trout and Atlantic salmon immunoglobulins.

Fusion Partners

Spleen cells from immunised Balb/c mice were fused with cells of the mouse NS0 myeloma cell line.

Specificity

Mouse anti Salmonid Ig monoclonal antibody, clone 5F12 recognizes salmonid immunoglobulin heavy chain, binding to Immunoglobulins of several genera of the subfamily Salmoninae, including:

<table>
<thead>
<tr>
<th>Salmon</th>
<th>Oncorhynchus</th>
<th>Salvelinus</th>
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</thead>
<tbody>
<tr>
<td>Atlantic Salmon</td>
<td>Chinook Salmon</td>
<td>Atlantic Char</td>
</tr>
<tr>
<td>Brown Trout</td>
<td>Chum Salmon</td>
<td>Brook Trout</td>
</tr>
</tbody>
</table>
CohoSalmon
Sockeye Salmon
Rainbow Trout

Binding of Mouse anti Salmonid Ig monoclonal antibody, clone 5F12 to immunoglobulin of the related salmonid subfamilies Coregoninae (Whitefish) and Thymallinae (Graylings) has not been evaluated. Mouse anti Salmonid Ig monoclonal antibody, clone 5F12 does not appear to bind immunoglobulin of other fish species such as Siniperca chuatsi (Mandarin Fish or Chinese Perch) or Danio rerio (Zebra fish).

Disease organisms such as Aeromonas salmonicida, the causitive agent of furunculosis, Renibacterium salmoninarium which causes bacterial kidney disease in salmonids and infectious hematopoietic necrosis virus are major fish health concerns for salmonid aquaculture globally. Mouse anti Salmonid Ig monoclonal antibody, clone 5F12 has been utilized for the evaluation of the immunoglobulin response in multiple studies looking at pathogen and parasite exposure (Henriksen et al. 2015) and in a number of vaccine studies evaluating vaccine components, administration routes and schedules (Marana et al. 2017).

Western Blotting
This antibody detects a band of approximately 71 kDa using Salmon immune serum.

References
Onchorhynchus mykiss (Walbaum), after waterborne exposure to Flavobacterium psychrophilum
vaccination against Aeromonas salmonicida in rainbow trout. Fish Shellfish Immunol. 42: 193-203.
15. Deshmukh, S. et al. (2013) Insight from molecular, pathological, and immunohistochemical
studies on cellular and humoral mechanisms responsible for vaccine-induced protection of rainbow
ruckeri vaccine in rainbow trout (Onchorhynchus mykiss). Fish Shellfish Immunol. 37: 60-5.
confers protection against ERM in rainbow trout Aquaculture. 440: 1-5.
antigen concentration and protection in vaccinated rainbow trout Oncorhynchus mykiss evaluated
by a tail fin infection model. J Fish Dis. Sep 5. [Epub ahead of print]
19. Schmidt, J. G. et al. (2016) ERM booster vaccination of rainbow trout using diluted bacterin:
Field studies Aquaculture. 464: 262-7.
20. Marana, M.H. et al. (2017) Subunit vaccine candidates against Aeromonas salmonicida in
factors on challenge success: Aeromonas salmonicida infection in vaccinated rainbow trout. Fish

Storage
Store at +4°C or at -20°C if preferred.
This product should be stored undiluted.
Storage in frost-free freezers is not recommended. 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 #10055 available at:

Regulatory
For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP
Goat Anti Mouse IgG (STAR77...) HRP
Rabbit Anti Mouse IgG (STAR12...) RPE
Rabbit Anti Mouse IgG (STAR8...) DyLight®800
Human Anti Mouse IgG2a (HCA037...) FITC, HRP
Rabbit Anti Mouse IgG (STAR13...) HRP
Goat Anti Mouse IgG (STAR76...) RPE
Goat Anti Mouse IgG (STAR70...) FITC
Recommended Useful Reagents

MOUSE ANTI RAINBOW TROUT Ig (MCA5976)
MOUSE ANTI INFECTIOUS SALMON ANEMIA VIRUS (ISAV) (MCA5977)
MOUSE ANTI FLAVOBACTERIUM PSYCHROPHILUM:FITC (MCA5978F)
RABBIT ANTI SALMONID Ig (AHP761)