Datasheet: MCA1780A647

Description: MOUSE ANTI DOG CD18: Alexa Fluor®647

Specificity: CD18

Other names: INTEGRIN BETA 2 CHAIN

Format: ALEXA FLUOR® 647

Product Type: Monoclonal Antibody

Clone: CA1.4E9

Isotype: IgG1

Quantity: 100 TESTS/1ml

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>
<th>Applications</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
<td>Neat - 1/10</td>
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</table>

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

Dog

Species Cross Reactivity

Reacts with: Horse, Pig, Human, Bovine, Cat, Mink, Hooded Seal

Based on sequence similarity, is expected to react with: Mustelid

N.B. Antibody reactivity and working conditions may vary between species.

Product Form

Purified IgG conjugated to Alexa Fluor® 647 - liquid

Max Ex/Em

<table>
<thead>
<tr>
<th>Fluorophore</th>
<th>Excitation Max (nm)</th>
<th>Emission Max (nm)</th>
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<tbody>
<tr>
<td>Alexa Fluor®647</td>
<td>650</td>
<td>665</td>
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</table>

Preparation

Purified IgG prepared by affinity chromatography on Protein G from ascites

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide (NaN₃)

1% Bovine Serum Albumin

Approx. Protein Concentrations

IgG concentration 0.05 mg/ml

RRID

AB_2020973
Mouse anti Dog CD18 antibody, clone CA1.4E9 recognizes the canine CD18 cell surface antigen, also known as the b2 integrin.

The tissue and cellular distribution of CD18 in canine tissue closely follows that observed for humans (Moore et al. 1990) CD18 is expressed by virtually all leucocytes, but more strongly upon monocytes and granulocytes than on lymphocytes. The cross reactivity patterns of Mouse anti Canine CD18, clone CA1.4E9 further indicate that the antibody clone recognizes an epitope common to a number of mammalian species.

Immunoprecipitation experiments using detergent lysates of iodinated peripheral blood leukocytes indicate that clone Ca1.4E9 immunoprecipitates the common 95 kDa beta 2 integrin chain (CD18) along with the non-covalently associated alpha chains at 180 kDa (CD11a), 165 kDa (CD11b) and 150 kDa (CD11c) (Moore et al. 1990). Of note is the lack of precipitation of the integrin alpha D chain (CD11d), this is likely due to the almost complete absence of CD11d expression on peripheral blood lymphocytes, in contrast to expression in the splenic red pulp (Fry et al. 2003).

High CD18 expression is a common feature of lymphoma and hyperplasia in dogs (Caniatti et al. 1996)

**Flow Cytometry**

Use 10ul of the suggested working dilution to label 10^6 cells or 100ul whole blood

**References**


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<tr>
<td>Storage</td>
<td>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.</td>
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<td>Guarantee</td>
<td>12 months from date of despatch</td>
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<td>Acknowledgements</td>
<td>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 <a href="mailto:outlicensing@thermofisher.com">outlicensing@thermofisher.com</a></td>
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<tr>
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<td>For research purposes only</td>
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**Related Products**

**Recommended Negative Controls**

**MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 (MCA928A647)**

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