**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

**RRID** AB_2020973

**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](http://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>
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</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
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<td>Neat - 1/10</td>
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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>
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<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

**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
Specificity

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

and monocytes. 

**Further Reading**


**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.

**Guarantee**

18 months from date of despatch.

**Acknowledgements**

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**Health And Safety Information**


**Regulatory**

For research purposes only

**Recommended Products**

**Recommended Negative Controls**

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