Datasheet: MCA1780GA

**Product Details**

**Description:** MOUSE ANTI DOG CD18

**Specificity:** CD18

**Other names:** INTEGRIN BETA 2 CHAIN

**Format:** Purified

**Product Type:** Monoclonal Antibody

**Clone:** CA1.4E9

**Isotype:** IgG1

**Quantity:** 0.1 mg

**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).

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<tr>
<th>Application</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
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<tr>
<td>Flow Cytometry</td>
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<td>1/25 - 1/200</td>
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<td>Immunohistology - Frozen</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.

(1) The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.

**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 - liquid

**Preparation**

Purified IgG prepared by affinity chromatography on Protein G

**Buffer Solution**

Phosphate buffered saline

**Preservative Stabilisers**

0.09% Sodium Azide (NaN₃)
**Approx. Protein Concentrations**
IgG concentration 1.0 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**
47-54.

**Further Reading**

**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.

**Guarantee**
18 months from date of despatch.

**Health And Safety Information**

**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*
- Rabbit Anti Mouse IgG (STAR13...) *HRP*
- Goat Anti Mouse IgG (STAR76...) *RPE*
- Goat Anti Mouse IgG (STAR70...) *FITC*
- Goat Anti Mouse IgG (Fc) (STAR120...) *FITC, HRP*
- Rabbit Anti Mouse IgG (STAR9...) *FITC*
- Goat Anti Mouse IgG (H/L) (STAR117...) *Alk. Phos., DyLight®488, DyLight®680, DyLight®800, FITC, HRP*

**Recommended Negative Controls**
- MOUSE IgG1 NEGATIVE CONTROL (MCA928)