Datasheet: MCA5916GA

**Description:** MOUSE ANTI DOG CD25

**Specificity:** CD25

**Other names:** IL-2R ALPHA CHAIN

**Format:** Purified

**Product Type:** Monoclonal Antibody

**Clone:** P4A10

**Isotype:** IgG1

**Quantity:** 0.1 mg

### 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](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>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
<td>Yes</td>
<td></td>
<td></td>
<td>1/50 - 1/100</td>
</tr>
<tr>
<td>Immunohistology - Frozen</td>
<td></td>
<td>YES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immunohistology - Paraffin</td>
<td></td>
<td>YES</td>
<td></td>
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<tr>
<td>Immunohistology - Resin</td>
<td></td>
<td>YES</td>
<td></td>
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<tr>
<td>ELISA</td>
<td></td>
<td>YES</td>
<td></td>
<td></td>
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<tr>
<td>Immunoprecipitation</td>
<td></td>
<td>YES</td>
<td></td>
<td></td>
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<tr>
<td>Western Blotting (1)</td>
<td></td>
<td>YES</td>
<td></td>
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</tbody>
</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.

(1)Clone P4A10 produces a double band at approximately 55kDa under non-reducing conditions. A non-specific band may be observed at 116kDa

**Target Species:** Dog

**Product Form**

Purified IgG - liquid

**Preparation**

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

**Buffer Solution**

Phosphate buffered saline

**Preservative Stabilisers**

0.09% Sodium Azide

**Carrier Free**

Yes

**Approx. Protein Concentrations**

IgG concentration 1.0 mg/ml
Immunogen

Enriched and stimulated Canine T cells.

External Database Links

UniProt: O62802
Related reagents

Entrez Gene:

403870 IL2RA
Related reagents

Fusion Partners

Spleen cells from immunised RBF/DnJ mice were fused with cells of the mouse P3-653 myeloma cell line.

Specificity

Mouse anti Dog CD25, clone P4A10 recognizes the canine homologue of the human CD25 cell surface antigen, also known at IL-2Rα, a glycoprotein of approximately 55 kDa expressed primarily by activated T lymphocytes (Abrams et al. 2010).

The IL-2 receptor is composed of 3 subunits, an α chain (CD25), a β chain (CD122) and a γ chain (CD132), CD25 functions as a low affinity receptor for IL-2.

Research has demonstrated that antibodies to CD4, FoxP3 and CD25 may be used in studies of T regulatory cells (Tregs), a unique subset of T helper cells that function in the control of effector cells vital in preventing autoimmunity.

Previous studies of canine Tregs have utilized the mouse anti human CD25 monoclonal antibody, clone ACT1, which has demonstrated cross reactivity to canine CD25 (Rissetto et al. 2010). However this clone has poor affinity for canine CD25. The development of clone P4A10 now offers a specific monoclonal Mouse anti Canine CD25, demonstrating a greater affinity for canine CD25 than the cross reactive anti human antibody (Abrams et al. 2010).

The dog is an important veterinary species in its own right. In addition dogs are used as an animal model in the study of a number of serious human disease states including various forms cancers (Paoloni et al. 2008), and in genetically related diseases of the hemopoietic system (Bauer et al. 2009). The generation of clone P4A10 provides an improved tool for the identification of canine CD25 and will facilitate studies in this species.

Flow Cytometry

Use 10ul of the suggested working dilution to label 1x10⁶ cells in 100ul.

Western Blotting

Clone P4A10 detects a double band of approximately 55kDa in PMA-IO activated canine PBMC lysates.

References


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. 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**

<table>
<thead>
<tr>
<th>Antibody</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goat Anti Mouse IgG (STAR87...)</td>
<td><a href="#">Alk. Phos., HRP</a></td>
</tr>
<tr>
<td>Goat Anti Mouse IgG (STAR77...)</td>
<td><a href="#">HRP</a></td>
</tr>
<tr>
<td>Rabbit Anti Mouse IgG (STAR12...)</td>
<td><a href="#">HRP</a></td>
</tr>
<tr>
<td>Rabbit Anti Mouse IgG (STAR8...)</td>
<td><a href="#">DyLight®680</a></td>
</tr>
<tr>
<td>Rabbit Anti Mouse IgG (STAR13...)</td>
<td><a href="#">HRP</a></td>
</tr>
<tr>
<td>Goat Anti Mouse IgG (STAR76...)</td>
<td><a href="#">RPE</a></td>
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<tr>
<td>Goat Anti Mouse IgG (STAR70...)</td>
<td><a href="#">FITC</a></td>
</tr>
<tr>
<td>Goat Anti Mouse IgG (Fc) (STAR120...)</td>
<td><a href="#">FITC, HRP</a></td>
</tr>
<tr>
<td>Rabbit Anti Mouse IgG (STAR9...)</td>
<td><a href="#">FITC</a></td>
</tr>
<tr>
<td>Goat Anti Mouse IgG (H/L) (STAR117...)</td>
<td><a href="#">Alk. Phos., DyLight®488, DyLight®549, DyLight®649, DyLight®680, DyLight®800, FITC, HRP</a></td>
</tr>
</tbody>
</table>

**Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

**Recommended Useful Reagents**

RAT ANTI DOG CD8 (MCA1039GA)
RAT ANTI DOG CD4 (MCA1038GA)
MOUSE ANTI DOG CD3 (MCA1774GA)
MOUSE ANTI DOG CD3:FITC (MCA1774F)