Datasheet: MCA2371

**Description:** MOUSE ANTI BOVINE INTERLEUKIN-4

**Specificity:** IL-4

**Format:** Purified

**Product Type:** Monoclonal Antibody

**Clone:** CC313

**Isotype:** IgG2a

**Quantity:** 0.5 mg

### Product Details

**RRID** AB_2249178

#### 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>
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<tr>
<th>Technique</th>
<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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<td>Immunohistology - Frozen</td>
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<td>Immunohistology - Paraffin</td>
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<td>ELISA</td>
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<td>2ug/ml - 5ug/ml</td>
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<td>Immunoprecipitation</td>
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<td>Western Blotting</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** Bovine

**Species Cross Reactivity** Reacts with: Sheep, Goat

**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 A from tissue culture supernatant

**Buffer Solution** Phosphate buffered saline

**Preservative Stabilisers** 0.09% Sodium Azide

**Carrier Free** Yes

**Approx. Protein** IgG concentration 1.0 mg/ml
**Concentrations**

**Immunogen** Recombinant bovine IL-4.

**External Database Links**

<table>
<thead>
<tr>
<th>UniProt:</th>
<th>Related reagents</th>
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<td>P30367</td>
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<th>Entrez Gene:</th>
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<tr>
<td>280824</td>
<td>IL4</td>
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**Fusion Partners**

Spleen cells from immunised BALB/c mice were fused with cells of the SP2/O myeloma cell line.

**Specificity**

Mouse anti Bovine interleukin-4, clone CC313 is specific for bovine interleukin 4 (IL-4), also known as B-cell stimulatory factor 1. Bovine interleukin-4 is a 15 kDa, 135 amino acid peptide which is processed to a mature secreted form with the cleavage of a 24 amino acid, N-terminal signal peptide resulting in a 12.6 kDa active cytokine, the apparent MW may be altered by glycosylation (Heussler et al. 1992).

IL-4 is expressed by a range of cells including T and B cells, macrophages and monocytes. It plays an important role in the regulation of bovine T and B cell responses.

Mouse anti Bovine interleukin-4, clone CC313 has been used successfully as a coating antibody in a sandwich ELISA with biotinylated Mouse anti Bovine IL-4 antibody, clone CC314 (MCA2372B) as a detection reagent both with bovine (Stabel et al. 2011) and ovine samples (Olivier et al. 2012). Clones CC313 and CC314 have been used in the reverse configuration for the measurement of interleukin-4 in caprine samples (Marinaro et al. 2012).

**Flow Cytometry**

Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.

**ELISA**

This reagent may be used as a capture antibody in sandwich ELISA assays for bovine IL-4 in combination with MCA2372B as a detection reagent, and recombinant bovine IL-4 (PBP006) as a standard.

**References**

8. Marinaro, M. et al. (2012) Antigen-specific IFN-gamma and IL-4 production in caprine...

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
Material Safety Datasheet documentation #10040 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
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
Human Anti Mouse IgG2a (HCA037...) FITC, HRP
Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®680, DyLight®800, FITC, HRP

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL (MCA929)