Datasheet: MCA2372B

Description: MOUSE ANTI BOVINE INTERLEUKIN-4:Biotin
Specificity: IL-4
Format: Biotin
Product Type: Monoclonal Antibody
Clone: CC314
Isotype: IgG2b
Quantity: 0.25 mg

Product Details

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>
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<tr>
<th>Applications</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
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<tbody>
<tr>
<td>Immunohistology - Frozen</td>
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<td>Immunohistology - Paraffin</td>
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<td>ELISA</td>
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<td>1ug/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: Goat, Sheep

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

Product Form: Purified IgG conjugated to Biotin - 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 1% Bovine Serum Albumin

Approx. Protein Concentrations: IgG concentration 1.0 mg/ml

Immunogen: Recombinant bovine IL-4.
Spleen cells from immunised BALB/c mice were fused with cells of the SP2/0 myeloma cell line.

**Specificity**

Mouse anti Bovine interleukin-4 antibody, clone CC314 recognizes bovine interleukin-4 (IL-4), also known as B-cell stimulatory factor 1. 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. 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).

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Mouse anti Bovine interleukin-4, clone CC314 has been used successfully as a detection antibody in a sandwich ELISA with Mouse anti Bovine IL-4 antibody, clone CC313 (MCA2371) as a coating 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 1x10^6 cells in 100ul.

**ELISA**

This biotin conjugate may be used as detection reagent in sandwich ELISA assays for bovine IL-4 with MCA2371 as capture reagent, and recombinant bovine IL-4 (PBP006) as a standard.

**References**


**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
Shelf Life
18 months from date of despatch.

Health And Safety Information
Material Safety Datasheet documentation #10041 available at:

Regulatory
For research purposes only