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

**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>Application</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
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</thead>
<tbody>
<tr>
<td>Immunohistology - Frozen</td>
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<tr>
<td>Immunohistology - Paraffin</td>
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<tr>
<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 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**

Bovine

**Species Cross Reactivity**

Reacts with: Goat, Sheep

**N.B.** Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

**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 (NaN₃) 
1% bovine serum albumin 

Approx. Protein Concentrations  
IgG concentration 1.0 mg/ml 

Immunogen  
Recombinant bovine IL-4. 

External Database Links  
UniProt: P30367 Related reagents 
Entrez Gene: 280824 IL4 Related reagents 

RRID  
AB_2127032 

Fusion Partners  
Spleen cells form 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 10μl of the suggested working dilution to label 1x10⁶ cells in 100μl 

ELISA  
Biotin conjugated Mouse anti Bovine interleukin-4 antibody, clone CC314 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  
2. Stabel, J.R. et al. (2011) Mediation of host immune responses after immunization of


### Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

### Guarantee

12 months from date of despatch

### Health And Safety Information

Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2372B 10041

### Regulatory

For research purposes only