

## Datasheet: MCA2111B

<b>Description:</b>	MOUSE ANTI BOVINE INTERLEUKIN-10:Biotin
<b>Specificity:</b>	IL-10
<b>Format:</b>	Biotin
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CC320
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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).

	Yes	No	Not Determined	Suggested Dilution
Immunohistology - Frozen			■	
Immunohistology - Paraffin			■	
ELISA	■			2ug/ml - 5ug/ml
Immunoprecipitation			■	
Western Blotting			■	

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Bovine
<b>Species Cross Reactivity</b>	Reacts with: Horse, Sheep, Goat <b>N.B.</b> Antibody reactivity and working conditions may vary between species.
<b>Product Form</b>	Purified IgG conjugated to Biotin - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Plasmid cDNA encoding bovine IL-10.
<b>External Database Links</b>	<b>UniProt:</b>

**Entrez Gene:**

[281246](#)   IL10   [Related reagents](#)

<b>Fusion Partners</b>	Spleen cells from immunised Balb/c mice were fused with cells of the mouse sp2/0 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Bovine Interleukin-10 antibody, clone CC320</b> recognizes bovine IL-10.</p> <p>Mouse anti Bovine Interleukin-10 antibody, clone CC320 has been shown to neutralize the activity of bovine IL-10 as measured by the inhibition of the inhibitory activity of IL-10 on IFN gamma synthesis (<a href="#">Buza <i>et al.</i> 2004</a>).</p>
<b>ELISA</b>	This biotin conjugate may be used as detection reagent in a sandwich ELISA assay for bovine IL-10 with <a href="#">MCA2110</a> as capture reagent, see <a href="#">Bannerman, D.D.<i>et al.</i></a>
<b>References</b>	<ol style="list-style-type: none"><li>1. Kwong, L.S. <i>et al.</i> (2002) Development of an ELISA for bovine IL-10. <a href="#">Vet Immunol Immunopathol. 85 (3-4): 213-23.</a></li><li>2. Buza JJ <i>et al.</i> (2004) Neutralization of interleukin-10 significantly enhances gamma interferon expression in peripheral blood by stimulation with Johnin purified protein derivative and by infection with <i>Mycobacterium avium</i> subsp. <i>paratuberculosis</i> in experimentally infected cattle with paratuberculosis. <a href="#">Infect Immun. 72 (4): 2425-8.</a></li><li>3. Scandurra, G.M. <i>et al.</i> (2010) Assessment of live candidate vaccines for paratuberculosis in animal models and macrophages. <a href="#">Infect Immun. 78 (3): 1383-9.</a></li><li>4. Weiss DJ <i>et al.</i> (2008) Bovine monocyte TLR2 receptors differentially regulate the intracellular fate of <i>Mycobacterium avium</i> subsp. <i>paratuberculosis</i> and <i>Mycobacterium avium</i> subsp. <i>avium</i>. <a href="#">J Leukoc Biol. 83 (1): 48-55.</a></li><li>5. Hamza, E. <i>et al.</i> (2007) Modulation of allergy incidence in icelandic horses is associated with a change in IL-4-producing T cells. <a href="#">Int Arch Allergy Immunol. 144: 325-37.</a></li><li>6. Wenz, J.R. <i>et al.</i> (2010) Factors associated with concentrations of select cytokine and acute phase proteins in dairy cows with naturally occurring clinical mastitis. <a href="#">J Dairy Sci. 93: 2458-70.</a></li><li>7. Rinaldi, M. <i>et al.</i> (2010) A sentinel function for teat tissues in dairy cows: dominant innate immune response elements define early response to <i>E. coli</i> mastitis. <a href="#">Funct Integr Genomics. 10: 21-38.</a></li><li>8. Parker, D.G. <i>et al.</i> (2010) Lentivirus-mediated gene transfer of interleukin 10 to the ovine and human cornea. <a href="#">Clin Experiment Ophthalmol. 38: 405-13.</a></li><li>9. Ferret-Bernard, S. <i>et al.</i> (2011) Mesenteric lymph node cells from neonates present a prominent IL-12 response to CpG oligodeoxynucleotide via an IL-15 feedback loop of amplification. <a href="#">Vet Res. 42:19.</a></li><li>10. Lybeck, K.R. <i>et al.</i> (2009) Neutralization of interleukin-10 from CD14(+) monocytes enhances gamma interferon production in peripheral blood mononuclear cells from <i>Mycobacterium avium</i> subsp. <i>paratuberculosis</i>-infected goats. <a href="#">Clin Vaccine Immunol. 16 (7): 1003-11.</a></li><li>11. Ferret-Bernard, S. <i>et al.</i> (2010) Cellular and molecular mechanisms underlying the strong neonatal IL-12 response of lamb mesenteric lymph node cells to R-848. <a href="#">PLoS One. 5: e13705.</a></li><li>12. Souza, M. <i>et al.</i> (2008) Pathogenesis and immune responses in gnotobiotic calves after infection with the genogroup II.4-HS66 strain of human norovirus. <a href="#">J Virol. 82: 1777-86.</a></li><li>13. Ma&amp;347;lanka T <i>et al.</i> (2012) The presence of CD25 on bovine WC1+ gammadelta T cells is positively correlated with their production of IL-10 and TGF-beta, but not IFN-gamma. <a href="#">Pol J Vet Sci. 15 (1): 11-20.</a></li><li>14. Lybeck, K.R. <i>et al.</i> (2012) Intestinal Strictures, Fibrous Adhesions and High Local Interleukin-10 Levels in Goats Infected Naturally with <i>Mycobacterium avium</i> subsp. <i>paratuberculosis</i>. <a href="#">J Comp</a></li></ol>

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**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. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Shelf Life**

18 months from date of despatch.

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**Health And Safety Information**

Material Safety Datasheet documentation #10040 available at:  
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

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**Regulatory**

For research purposes only

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