

## Datasheet: MCA1782EL

**BATCH NUMBER 163392**

<b>Description:</b>	MOUSE ANTI BOVINE INTERLEUKIN-12/23:Low Endotoxin
<b>Specificity:</b>	IL-12 / IL-23
<b>Format:</b>	Low Endotoxin
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CC301
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	0.5 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
Flow Cytometry (1)	▪			1/10
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			8ug/ml
Immunoprecipitation			▪	
Western Blotting	▪			1/50 - 1/100
Functional Assays	▪			1/100
ELISpot	▪			

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.

**(1) Membrane permeabilization is required for this application. The use of Leucoperm (Product Code [BUF09](#)) is recommended for this purpose.**

### Target Species

Bovine

### Species Cross Reactivity

Reacts with: Human, Sheep, African Buffalo

Does not react with: Mouse

**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.

<b>Product Form</b>	Purified IgG - 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>	None present
<b>Carrier Free</b>	Yes
<b>Endotoxin Level</b>	< 0.01 EU/ug
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Recombinant bovine IL-12.
<b>External Database Links</b>	<p><b>UniProt:</b></p> <p><a href="#">P54349</a>    <a href="#">Related reagents</a></p> <p><a href="#">P46282</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b></p> <p><a href="#">281856</a> IL12A    <a href="#">Related reagents</a></p> <p><a href="#">281857</a> IL12B    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_616909
<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-12/23 antibody, clone CC301</b> recognizes the p40 subunit of bovine interleukin-12, and binds to both the free subunit and the intact heterodimer. The p40 subunit is also known as IL-12B and can form a heterodimer with either IL-12A or IL-23A.</p> <p>Mouse anti Bovine Interleukin-12/23 antibody, clone CC301 may be used as a capture antibody in an ELISA in combination with biotinylated Mouse anti Bovine Interleukin-12/23 antibody, clone CC326 (<a href="#">MCA2173B</a>) as a detection reagent.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>ELISA</b>	This antibody may be used as a capture antibody in a sandwich ELISA in combination with biotinylated clone CC326 ( <a href="#">MCA2173B</a> ) as detection reagent, see <a href="#">Bannerman, D.D. et al.</a>
<b>References</b>	1. Hope, J.C. <i>et al.</i> (2002) Development of detection methods for ruminant interleukin

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12. Beechler BR *et al.* (2015) Enemies and turncoats: bovine tuberculosis exposes pathogenic potential of Rift Valley fever virus in a common host, African buffalo (*Syncerus caffer*). [Proc Biol Sci. 282 \(1805\): .](#)
13. Pomeroy B *et al.* (2015) Monocyte-derived dendritic cells from late gestation cows have an impaired ability to mature in response to *E. coli* stimulation in a receptor and cytokine-mediated fashion. [Vet Immunol Immunopathol. 167 \(1-2\): 22-9.](#)
14. Stabel, J.R. & Bannantine, J.P. (2021) Reduced tissue colonization of *Mycobacterium avium* subsp. *paratuberculosis* in neonatal calves vaccinated with a cocktail of recombinant proteins. [Vaccine. May 06 \[Epub ahead of print\].](#)
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17. Ciliberti, M.G. *et al.* (2020) Nexus Between Immune Responses and Oxidative Stress: The Role of Dietary Hydrolyzed Lignin in *ex vivo* Bovine Peripheral Blood Mononuclear Cell Response. [Front Vet Sci. 7: 9.](#)

18. Tavalire, H.F. *et al.* (2019) Risk alleles for tuberculosis infection associate with reduced immune reactivity in a wild mammalian host. [Proc Biol Sci. 286 \(1907\): 20190914.](#)

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**Storage** Store at -20°C only.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. 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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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10162 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1782EL>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),  
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),  
[FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:Low Endotoxin \(MCA929EL\)](#)

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Printed on 26 Feb 2024