

## Datasheet: MCA2173B BATCH NUMBER 152036

Description:	MOUSE ANTI BOVINE INTERLEUKIN-12/23:Biotin
Specificity:	IL-12 / IL-23
Format:	Biotin
Product Type:	Monoclonal Antibody
Clone:	CC326
Isotype:	lgG2b
Quantity:	0.25 mg

## **Product Details**

Applications	This product has been re	ported to	work in th	ne following applicatio	ons. This information is
	derived from testing withi	n our labo	oratories,	peer-reviewed publica	ations or personal
	communications from the	originato	rs. Please	e refer to references i	ndicated for further
	information. For general	protocol re	ecommen	dations, please visit <u>v</u>	www.bio-
	rad-antibodies.com/proto	cols.			
		Yes	No	Not Determined	Suggested Dilution
	Immunohistology - Frozen			•	
	Immunohistology - Paraffin			•	
	ELISA	•			5ug/ml
	Immunoprecipitation			•	
	Where this antibody has	not been t	tested for	use in a particular te	chnique this does not
	necessarily exclude its us	se in such	procedu	res. Suggested workir	ng dilutions are given as
	a quide only. It is recomm	nended the	at the use	er titrates the antibody	v for use in their own
	system using appropriate	e negative/	positive o	controls.	,
Target Species	Bovine				
Species Cross	Reacts with: Sheep, Hum	nan			
Reactivity	N.B. Antibody reactivity a	and workin	ig conditio	ons may vary betwee	n species. Cross
	reactivity is derived from	testing wit	thin our la	aboratories, peer-revie	ewed publications or
	personal communications	s from the	originato	rs. Please refer to ref	erences indicated for
	further information.		Ū		
Product Form	Purified IgG conjugated t	o Biotin -	liquid		
Preparation	Purified IgG prepared by	affinitv ch	romatoar	aphy on Protein A fro	m tissue culture
-				, .,	
	supernatant				
	supernatant				

Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Recombinant bovine IL-12.
External Database Links	UniProt:P46282Related reagentsP54349Related reagents
	Entrez Gene: <u>281857</u> IL12B <u>Related reagents</u> <u>281856</u> IL12A <u>Related reagents</u>
RRID	AB_324111
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.
Specificity	<b>Mouse anti Bovine Interleukin-12/23 antibody, clone CC326</b> recognizes the p40 subunit of bovine interleukin-12. The p40 subunit is also known as IL-12B and can form a heterodimer with either IL-12A or IL-23A. Mouse anti Bovine Interleukin-12/23 antibody, clone CC326 has been shown to block the biological activity of bovine IL-12.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells of 100ul.
ELISA	This biotin conjugate may be used as detection reagent in a sandwich ELISA assay using <u>MCA1782EL</u> as capture reagent, see <u>Bannerman, D.D.<i>et al.</i></u>
References	<ol> <li>Hope, J.C. <i>et al.</i> (2002) Development of detection methods for ruminant interleukin (IL)-12. JImmunol Methods. 266 (1-2): 117-26.</li> <li>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. J Dairy Sci. 93: 2458-70.</li> <li>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. Funct Integr Genomics. 10: 21-38.</li> <li>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. <u>Vet Res. 42:19.</u></li> <li>Contreras, V. <i>et al.</i> (2010) Existence of CD8α-like dendritic cells with a conserved functional specialization and a common molecular signature in distant mammalian species. <u>J Immunol. 185: 3313-25.</u></li> <li>Bannerman, D.D. <i>et al.</i> (2004) <i>Escherichia coli</i> and <i>Staphylococcus aureus</i> elicit differential innate immune responses following intramammary infection. <u>Clin Diagn Lab</u></li> </ol>

		Immunol. <u>11: 463-72.</u> 7. 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. PLoS C
		<ul> <li>8. Souza, M. <i>et al.</i> (2008) Pathogenesis and immune responses in gnotobiotic calves a infection with the genogroup II.4-HS66 strain of human norovirus. J Virol. 82: 1777-86.</li> <li>9. Stephens, S.A. <i>et al.</i> (2003) Differences in cytokine synthesis by the sub-populations dendritic cells from afferent lymph. Immunology. 110: 48-57.</li> <li>10. Verhelst, D. <i>et al.</i> (2014) Parasite distribution and associated immune response dur the acute phase of <i>Toxoplasma gondii</i> infection in sheep. BMC Vet Res.10: 293.</li> <li>11. Beechler, B.R. <i>et al.</i> (2015) Enemies and turncoats: bovine tuberculosis exposes pathogenic potential of Rift Valley fever virus in a common host, African buffalo (<i>Syncel caffer</i>). Proc Biol Sci. 282 (1805) pii: 20142942.</li> <li>12. Rutigliano, H.M. <i>et al.</i> (2016) Trophoblast Major Histocompatibility Complex Class I Expression Is Associated with Immune-Mediated Rejection of Bovine Fetuses Produce by Cloning. Biol Reprod. 95 (2): 39.</li> </ul>
Storage		Store at +4°C or at -20°C if preferred.
		This product should be stored undiluted
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		Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawin as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
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Guarante Health A Informati	ee nd Safety on	This product should be stored undified.         Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawin as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.         12 months from date of despatch         Material Safety Datasheet documentation #10040 available at:         https://www.bio-rad-antibodies.com/SDS/MCA2173B         10040
Guarante Health A Informati Regulato	ee nd Safety on ry	Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawin as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.         12 months from date of despatch         Material Safety Datasheet documentation #10040 available at:         https://www.bio-rad-antibodies.com/SDS/MCA2173B         10040         For research purposes only
Guarante Health A Informati Regulato	ee nd Safety on ry Tel: +1 800 265 Fax: +1 919 878 Email: antibody	Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawin as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.         12 months from date of despatch         Material Safety Datasheet documentation #10040 available at:         https://www.bio-rad-antibodies.com/SDS/MCA2173B         10040         For research purposes only         376       Worldwide         Tel: +44 (0)1865 852 700       Europe         Tel: +49 (0) 89 8090 95 21         Fax: +44 (0)1865 852 739       Fax: +49 (0) 89 8090 95 20         sales_us@bio-rad.com       Email: antibody_sales_uk@bio-rad.com

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