

Datasheet: MCA2173B

BATCH NUMBER 1801

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 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.

	Yes	No	Not Determined	Suggested Dilution
Immunohistology - Frozen			•	
Immunohistology - Paraffin			•	
ELISA	•			5ug/ml
Immunoprecipitation				

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: Sheep, Human 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		
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml		
Immunogen	Recombinant bovine IL-12.		
External Database Links	UniProt: P46282 Related reagents P54349 Related reagents		
	Entrez Gene: 281857 IL12B Related reagents		
	281856 IL12A Related reagents		
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	Mouse anti Bovine Interleukin-12/23 antibody, clone CC326 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 ⁶ cells of 100ul.		
ELISA	This biotin conjugate may be used as detection reagent in a sandwich ELISA assay using MCA1782EL as capture reagent, see Bannerman , D.D.et al.		
References	 Hope, J.C. <i>et al.</i> (2002) Development of detection methods for ruminant interleukin (IL)-12. J Immunol Methods. 266 (1-2): 117-26. 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. 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. 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. Vet Res. 42:19. 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. J Immunol. 185: 3313-25. 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. Clin Diagn Lab

Immunol. 11: 463-72.

- 7. Ferret-Bernard, S. *et al.* (2010) Cellular and molecular mechanisms underlying the strong neonatal IL-12 response of lamb mesenteric lymph node cells to R-848. <u>PLoS One.</u> 5: e13705.
- 8. Souza, M. *et al.* (2008) Pathogenesis and immune responses in gnotobiotic calves after infection with the genogroup II.4-HS66 strain of human norovirus. J Virol. 82: 1777-86.
- 9. Stephens, S.A. *et al.* (2003) Differences in cytokine synthesis by the sub-populations of dendritic cells from afferent lymph. <u>Immunology</u>. 110: 48-57.
- 10. Verhelst, D. *et al.* (2014) Parasite distribution and associated immune response during the acute phase of *Toxoplasma gondii* infection in sheep. <u>BMC Vet Res.10: 293.</u>
- 11. Beechler, B.R. *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) pii: 20142942.
- 12. Rutigliano, H.M. *et al.* (2016) Trophoblast Major Histocompatibility Complex Class I Expression Is Associated with Immune-Mediated Rejection of Bovine Fetuses Produced by Cloning. Biol Reprod. 95 (2): 39.

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

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2173B 10040
Regulatory	For research purposes only

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M366286:200529'

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