

## Datasheet: MCA2335B

<b>Description:</b>	MOUSE ANTI BOVINE TNF ALPHA:Biotin
<b>Specificity:</b>	TNF ALPHA
<b>Format:</b>	Biotin
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CC328
<b>Isotype:</b>	IgG2a
<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	▪			1ug/ml - 5ug/ml
Western Blotting			▪	

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: 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 G from tissue culture supernatant

### Buffer Solution

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>	Recombinant bovine TNF alpha.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q06599</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">280943</a>    TNF    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	TNFA, TNFSF2
<b>RRID</b>	AB_2204112
<b>Specificity</b>	<p><b>Mouse anti Bovine TNF alpha antibody, clone CC328</b> recognizes bovine TNF alpha, a 17.5kDa cytokine, expressed by many different stimulated cell types including monocytes, macrophages, endothelial cells, fibroblasts and both T and B-lymphocytes.</p> <p>The production of TNF alpha is induced by a variety of factors, dependant upon cell type and includes bacterial toxins, IL-1, PDGF, IFN-beta, NGF, Oncostatin M and viral infections. The presence of TNF alpha is responsible for diverse immunomodulatory, anti-tumour and toxic effects and under certain conditions is also capable of self-stimulation and inhibition.</p>
<b>ELISA</b>	Biotinylated Mouse anti Bovine TNF alpha antibody, clone CC328 may be used as a detection antibody in a sandwich ELISA for bovine TNF alpha in combination with Mouse anti Bovine TNF $\alpha$ antibody, clone CC327 ( <a href="#">MCA2334</a> ) as capture reagent. Recombinant Bovine TNF $\alpha$ ( <a href="#">PBP005</a> ) may be used as a standard.
<b>References</b>	<ol style="list-style-type: none"> <li>Hope, J.C. <i>et al.</i> (2003) Maturation of bovine dendritic cells by lipopeptides. <a href="#">Vet. Immunol. Immunopathol. 95: 21-31.</a></li> <li>Whelan, A.O. <i>et al.</i> (2003) Modulation of the bovine delayed-type hypersensitivity responses to defined mycobacterial antigens by a synthetic bacterial lipopeptide. <a href="#">Infect Immun. 71 (11): 6420-5.</a></li> <li>Guernon J <i>et al.</i> (2003) A tumour necrosis factor alpha autocrine loop contributes to proliferation and nuclear factor-kappaB activation of <i>Theileria parva</i>-transformed B cells. <a href="#">Cell Microbiol. 5 (10): 709-16.</a></li> <li>Kwong, L.S. <i>et al.</i> (2010) Production and characterization of two monoclonal antibodies to bovine tumour necrosis factor alpha (TNF-alpha) and their cross-reactivity with ovine TNF-alpha. <a href="#">Vet Immunol Immunopathol. 135 (3-4): 320-4.</a></li> <li>Sow, F.B. <i>et al.</i> (2011) Respiratory syncytial virus is associated with an inflammatory response in lungs and architectural remodeling of lung-draining lymph nodes of newborn lambs. <a href="#">Am J Physiol Lung Cell Mol Physiol. 300 (1): L12-24.</a></li> <li>Simojoki, H. <i>et al.</i> (2011) Innate immune response in experimentally induced bovine</li> </ol>

intramammary infection with *Staphylococcus simulans* and *S. epidermidis*. [Vet Res. 42: 49.](#)

7. Redondo, E. *et al.* (2014) Induction of interleukin-8 and interleukin-12 in neonatal ovine lung following experimental inoculation of bovine respiratory syncytial virus. [J Comp Pathol. 150 \(4\): 434-48.](#)

8. Camejo, M.I. *et al.* (2014) TNF-alpha in bulls experimentally infected with *Trypanosoma vivax*: a pilot study. [Vet Immunol Immunopathol. 162 \(3-4\): 192-7.](#)

9. Rodrigues, V. *et al.* (2017) Development of a bead-based multiplexed assay for simultaneous quantification of five bovine cytokines by flow cytometry. [Cytometry A. 91 \(9\): 901-7.](#)

10. Castel, A. *et al.* (2021) Recording and manipulation of vagus nerve electrical activity in chronically instrumented unanesthetized near term fetal sheep. [J Neurosci Methods. 360: 109257.](#)

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**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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2335B>  
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**Regulatory**

For research purposes only

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