Datasheet: MCA2335B

Description:	MOUSE ANTI BOVINE TNF ALPHA:Biotin
Specificity:	TNF ALPHA
Format:	Biotin
Product Type:	Monoclonal Antibody
Clone:	CC328
Isotype:	IgG2a
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	▪			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

Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Recombinant bovine TNF alpha.
External Database Links	**UniProt:** Q06599 Related reagents **Entrez Gene:** 280943 TNF Related reagents
Synonyms	TNFA, TNFSF2
RRID	AB_2204112
Specificity	**Mouse anti Bovine TNF alpha antibody, clone CC328** 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. 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.
ELISA	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 TNFα antibody, clone CC327 (MCA2334) as capture reagent. Recombinant Bovine TNFα (PBP005) may be used as a standard.
References	1. Hope, J.C. *et al.* (2003) Maturation of bovine dendritic cells by lipopeptides. Vet. Immunol. Immunopathol. 95: 21-31. 2. Whelan, A.O. *et al.* (2003) Modulation of the bovine delayed-type hypersensitivity responses to defined mycobacterial antigens by a synthetic bacterial lipopeptide. Infect Immun. 71 (11): 6420-5. 3. Guergnon J *et al.* (2003) A tumour necrosis factor alpha autocrine loop contributes to proliferation and nuclear factor-kappaB activation of *Theileria parva*-transformed B cells. Cell Microbiol. 5 (10): 709-16. 4. Kwong, L.S. *et al.* (2010) Production and characterization of two monoclonal antibodies to bovine tumour necrosis factor alpha (TNF-alpha) and their cross-reactivity with ovine TNF-alpha. Vet Immunol Immunopathol. 135 (3-4): 320-4. 5. Sow, F.B. *et al.* (2011) Respiratory syncytial virus is associated with an inflammatory response in lungs and architectural remodeling of lung-draining lymph nodes of newborn lambs. Am J Physiol Lung Cell Mol Physiol. 300 (1): L12-24. 6. Simojoki, H. *et al.* (2011) Innate immune response in experimentally induced bovine

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.
11. Burucúa, M.M. *et al.* (2024) Immunoregulatory and antiviral effect mediated by TLR7 and BMAP28 interaction in bovine alphaherpesvirus-infected respiratory primary cultures Veterinary Microbiology. : 110342.

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.
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/MCA2335B 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
'M396105:220610'

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