

Datasheet: MCA2678F

Description:	MOUSE ANTI BOVINE CD14:FITC
Specificity:	CD14
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	CC-G33
Isotype:	IgG1
Quantity:	0.1 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
Flow Cytometry	■			

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, Human, Water Buffalo N.B. Antibody reactivity and working conditions may vary between species.		
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
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 (NaN ₃) 1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.1mg/ml		
Immunogen	Partially purified polypeptides isolated from bovine leucocyte cell surface membrane.		
External Database Links	UniProt:		

Entrez Gene:

[281048](#) CD14 [Related reagents](#)

Fusion Partners Spleen cells from immunised Balb/c mice were fused with cells of the NS1 myeloma cell line.

Specificity **Mouse anti Bovine CD14, clone CC-G33** is a monoclonal antibody recognizing bovine CD14, a GPI-anchored membrane glycoprotein and monocyte/macrophage differentiation antigen, belonging to the lipopolysaccharide receptor family, also expressed weakly on microglia and Langerhans cells.

CD14 acts as a receptor for the potent bacterial endotoxin, lipopolysaccharide (LPS), facilitated by LPS-binding protein (LBP). The binding of LPS to CD14 results in cell activation and the release of cytokines and the inflammatory response, and has been shown to upregulate the cell surface expression of adhesion molecules.

Mouse anti Bovine CD14 clone CC-G33 cross-reacts with human CD14 expressed on transfected COS-7 cells, and also recognises an epitope on ovine CD14, see [Sopp et al. 1996](#) for details. CC-G33 has also been shown to be reactive with CD14 from the Water buffalo (*Bubalus bubalis*), see [Mirielli et al. 2013](#).

Flow Cytometry Use 10ul of the suggested working dilution to label 1x10⁶ cells in 100ul.

References

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[127-31.](#)

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19. Herry, V. *et al.* (2017) Local immunization impacts the response of dairy cows to *Escherichia coli* mastitis. [Sci Rep. 7 \(1\): 3441.](#)
20. Peponi, I. *et al.* (2017) A mycobacterial growth inhibition assay (MGIA) for bovine TB vaccine development. [Tuberculosis \(Edinb\). 106: 118-22.](#)

Storage

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

Health And Safety Information

Material Safety Datasheet documentation #10041 available at:
10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

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