

Mouse Anti-Bovine CD14,
monoclonal

CatNo **MAK2678GA**

Batch No: See label
Expiration Date: See Label
Storage: 2-8°C for 1 month
-20°C for longer

Clone Number:	CC-G33
Volume/Quantity:	0.1 mg
CD-Number:	CD14
Product Form:	Purified IgG - liquid
Preservatives Stabilisers:	0.09% Sodium Azide (NaN3)
Approx. Protein Concentrations:	IgG concentration 1.0mg/ml
Preparation:	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution:	Phosphate buffered saline
Immunogen:	Partially purified polypeptides isolated from bovine leucocyte cell surface membrane
Fusion Partners:	Spleen cells from immunised Balb/c mice were fused with cells of the NS1 myeloma cell line
Isotype:	IgG1 (Mouse)
Specificity:	Mouse anti Bovine CD14, clone CC-G33 recognizes bovine CD14.
	CD14 is 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 (Berthon & Hopkins 1996), ovine CD14 (Sopp et al. 1996) and Water buffalo (Bubalus bubalis) CD14, (Mirielli et al. 2013)
Species Cross Reactivity:	Reacts with: Sheep, Human, Water Buffalo 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.

Applications:		Suggested Working Dilution
FlowCytometry	Yes	1/10 – 1/200
Immunohistology-frozen	Not tested	
Immunohistology-paraffin	Not tested	
Immunofluorescence	Yes	
ELISA	Not tested	
Immunoprecipitation	Not tested	
Western Blotting	Not tested	
Radioimmunoassay	Not tested	

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.

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Flow Cytometry

Use 10 µl of the suggested working dilution to label 10⁶ cells in 100µl.
Method sheets are available on request.

Recommended Secondary Reagents: F(ab')₂ rabbit anti-mouse IgG:FITC conjugate (LINARIS CatNo LST0009B)
F(ab')₂ rabbit anti-mouse IgG:RPE conjugate (LINARIS CatNo LST0012A/B)

Recommended Negative Controls: Mouse IgG1 Negative Control (LINARIS CatNo ITC0928)

Immunohistology

Recommended Secondary Reagents: F(ab')₂ rabbit anti-mouse IgG HRP conjugate - (LINARIS CatNo LST0013B)
Peroxidase Vectastain® ABC-*Elite* Mouse IgG (Vector CatNo PK-6102)
DAB-Substrate (LINARIS CatNo E108) or HistoGreen-Substrate (LINARIS CatNo E109)
Alkaline Phosphatase Vectastain® ABC Mouse IgG (Vector CatNo AK-5002)
Vector® Red (Vector CatNo SK-5100).

Recommended Negative Controls: Mouse IgG1 Negative Control (LINARIS CatNo ITC0928)

References

- Berthon, P. & Hopkins, J. (1996) Ruminant cluster CD14. Vet Immunol Immunopathol. 52 (4): 245-8
- Miarelli, M. et al. (2013) Tyrosine phosphorylation of monocyte-derived macrophage proteins in buffalo (*Bubalus bubalis*): A potential phenotype of natural resistance Open J Anim Sci. 03 (02): 127-31.

Storage Conditions: Store at 2-8°C for one month or at -20°C for longer!
Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life: 12 months from date of despatch.

Health and Safety Information: (A full Health and Safety assessment is available upon request)
This product contains sodium azide: a POISONOUS and HAZARDOUS SUBSTANCE which should be handled by trained staff only.

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For Research purposes only. Not for therapeutic or diagnostic use.

