

Datasheet: MCA1568P647

BATCH NUMBER 0615

Description:	MOUSE ANTI HUMAN CD14:RPE-Alexa Fluor® 647
Specificity:	CD14
Format:	RPE-ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	TÜK4
Isotype:	IgG2a
Quantity:	100 TESTS/1ml

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	▪			Neat - 1/10

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	Human		
Species Cross Reactivity	Reacts with: Dog, Goat, Cat, Rabbit, Mink, Bovine, Pig, Sheep, Cynomolgus monkey, Llama 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 R. Phycoerythrin (RPE) - Alexa Fluor® 647 - lyophilized		
Reconstitution	Reconstitute with 1.0 ml distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE-Alexa Fluor®647 488nm laser	496	667
	RPE-Alexa Fluor®647 561nm laser	546	667

Preparation	Purified IgG prepared by affinity chromatography on Protein A
Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide
Stabilisers	1% Bovine Serum Albumin 5% Sucrose
External Database Links	<p>UniProt: P08571 Related reagents</p> <p>Entrez Gene: 929 CD14 Related reagents</p>
RRID	AB_566519
Specificity	<p>Mouse anti human CD14 antibody, clone TÜK4 recognizes the human CD14 cell surface antigen. CD14 is a ~55 kDa glycoprotein that contains multiple leucine-rich repeats. It is anchored to the cell membrane via a glycosylphosphatidylinositol (GPI) linkage (Simmons et al. 1989), a soluble form of CD14 also exists (Bazil et al. 1986).</p> <p>CD14 is strongly expressed on the surface of monocytes and macrophages but has also been shown to be expressed on the surface of non-myeloid cells (Jersmann 2005). CD14 functions as a pattern recognition receptor (Pugin et al. 1994, Dziarski et al. 1998) in innate immunity for a variety of ligands, in particular for the LPS (endotoxin) of Gram-negative bacteria.</p> <p>Mouse anti human CD14 antibody, clone TÜK4 has been shown to block SDF-induced chemotaxis of U937 cells in a dose –dependent manner (Yang et al. 2003). Use of the anti-human CD14 antibody, Low Endotoxin format is recommended for this purpose.</p>
Flow Cytometry	Use 5ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood.
References	<ol style="list-style-type: none"> 1. Weiss, D.J. (2001) Evaluation of proliferative disorders in canine bone marrow by use of flow cytometric scatter plots and monoclonal antibodies. Vet Pathol. 38: 512-8. 2. Gupta, V.K. et al. (1996) Identification of the sheep homologue of the monocyte cell surface molecule--CD14. Vet Immunol Immunopathol. 51 (1-2): 89-99. 3. Sopp, P. & Howard, C.J. (1997) Cross-reactivity of monoclonal antibodies to defined human leucocyte differentiation antigens with bovine cells. Vet Immunol Immunopathol. 56 (1-2): 11-25. 4. Xiong, W. et al. (2010) Human Flt3L generates dendritic cells from canine peripheral blood precursors: implications for a dog glioma clinical trial. PLoS One. 5: e11074. 5. Werling, D. et al. (1998) Analysis of the phenotype and phagocytic activity of monocytes/macrophages from cattle infected with the bovine leukaemia virus. Vet Immunol Immunopathol. 62 (3): 185-95. 6. Yang, H. et al. (2003) Antibody to CD14 like CXCR4-specific antibody 12G5 could

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Further Reading

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Storage

Store at +4°C.

DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

12 months from date of despatch

Acknowledgements

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Health And Safety Information

Material Safety Datasheet documentation #20487 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1568P647>

Regulatory

For research purposes only

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