

# Datasheet: MCA1568P750

**BATCH NUMBER 0415**

<b>Description:</b>	MOUSE ANTI HUMAN CD14:RPE-Alexa Fluor® 750
<b>Specificity:</b>	CD14
<b>Format:</b>	RPE-ALEXA FLUOR® 750
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	TÜK4
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://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® 750 - lyophilized

### Reconstitution

Reconstitute with 1.0 ml distilled water

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE-Alexa Fluor®750 488nm laser	496	779
	RPE-Alexa Fluor®750 561nm laser	546	779

<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	0.09% Sodium Azide
<b>Stabilisers</b>	1% Bovine Serum Albumin 5% Sucrose
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P08571</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">929</a>    CD14    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_566520
<b>Specificity</b>	<p><b>Mouse anti human CD14 antibody, clone TÜK4</b> 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 (<a href="#">Simmons et al. 1989</a>), a soluble form of CD14 also exists (<a href="#">Bazil et al. 1986</a>).</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 (<a href="#">Jersmann 2005</a>). CD14 functions as a pattern recognition receptor (<a href="#">Pugin et al. 1994</a>, <a href="#">Dziarski et al. 1998</a>) 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 (<a href="#">Yang et al. 2003</a>). Use of the <a href="#">anti-human CD14 antibody, Low Endotoxin format</a> is recommended for this purpose.</p>
<b>Flow Cytometry</b>	Use 5ul of the suggested working dilution to label 10 <sup>6</sup> cells or 100ul whole blood.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Weiss, D.J. (2001) Evaluation of proliferative disorders in canine bone marrow by use of flow cytometric scatter plots and monoclonal antibodies. <a href="#">Vet Pathol. 38: 512-8.</a></li> <li>2. Gupta, V.K. et al. (1996) Identification of the sheep homologue of the monocyte cell surface molecule--CD14. <a href="#">Vet Immunol Immunopathol. 51 (1-2): 89-99.</a></li> <li>3. Sopp, P. &amp; Howard, C.J. (1997) Cross-reactivity of monoclonal antibodies to defined human leucocyte differentiation antigens with bovine cells. <a href="#">Vet Immunol Immunopathol. 56 (1-2): 11-25.</a></li> <li>4. Xiong, W. et al. (2010) Human Flt3L generates dendritic cells from canine peripheral blood precursors: implications for a dog glioma clinical trial. <a href="#">PLoS One. 5: e11074.</a></li> <li>5. Werling, D. et al. (1998) Analysis of the phenotype and phagocytic activity of monocytes/macrophages from cattle infected with the bovine leukaemia virus. <a href="#">Vet Immunol Immunopathol. 62 (3): 185-95.</a></li> <li>6. Yang, H. et al. (2003) Antibody to CD14 like CXCR4-specific antibody 12G5 could</li> </ol>

- inhibit CXCR4-dependent chemotaxis and HIV Env-mediated cell fusion. [Immunol Lett. 88 \(1\): 27-30.](#)
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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.

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#### Guarantee

12 months from date of despatch

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#### Acknowledgements

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#### Health And Safety Information

Material Safety Datasheet documentation #20487 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1568P750>

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