

## Datasheet: MCA1568SBV440

**BATCH NUMBER 100003961**

<b>Description:</b>	MOUSE ANTI HUMAN CD14:StarBright Violet 440
<b>Specificity:</b>	CD14
<b>Format:</b>	StarBright Violet 440
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	TÜK4
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	100 TESTS/0.5ml

### 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

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** 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 StarBright Violet 440 - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	StarBright Violet 440	385	438

**Preparation** Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Stabilisers</b>	1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350
<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>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 <i>et al.</i> 1989</a>), a soluble form of CD14 also exists (<a href="#">Bazil <i>et al.</i> 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 <i>et al.</i> 1994</a>, <a href="#">Dziarski <i>et al.</i> 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 <i>et al.</i> 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 in 100ul. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.
<b>References</b>	<ol style="list-style-type: none"> <li>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>Gupta, V.K. <i>et al.</i> (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>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>Xiong, W. <i>et al.</i> (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>Werling, D. <i>et al.</i> (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>Yang, H. <i>et al.</i> (2003) Antibody to CD14 like CXCR4-specific antibody 12G5 could inhibit CXCR4-dependent chemotaxis and HIV Env-mediated cell fusion. <a href="#">Immunol Lett. 88 (1): 27-30.</a></li> <li>Yoshino, N. <i>et al.</i> (2000) Upgrading of flow cytometric analysis for absolute counts,</li> </ol>

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#### Further Reading

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#### Storage

Store at +4°C. DO NOT FREEZE.  
This product should be stored undiluted.

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#### Guarantee

12 months from date of despatch

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#### Acknowledgements

This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts

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#### Health And Safety Information

Material Safety Datasheet documentation #20438 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA1568SBV440>  
20438

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#### Regulatory

For research purposes only

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## Related Products

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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