

Datasheet: MCA1568A647

**BATCH NUMBER 168788**

|                      |  |
|----------------------|--|
| <b>Description:</b>  | MOUSE ANTI HUMAN CD14:Alexa Fluor® 647 |
| <b>Specificity:</b>  | CD14                                   |
| <b>Format:</b>       | ALEXA FLUOR® 647                       |
| <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 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 Alexa Fluor® 647 - liquid

| Max Ex/Em | Fluorophore     | Excitation Max (nm) | Emission Max (nm) |
|-----------|-----------------|---------------------|-------------------|
|           | Alexa Fluor®647 | 650                 | 665               |

**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  |
| <b>Approx. Protein Concentrations</b> | IgG concentration 0.05 mg/ml   |
| <b>External Database Links</b>        | <p><b>UniProt:</b><br/> <a href="#">P08571</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">929</a>    CD14    <a href="#">Related reagents</a></p>   |
| <b>RRID</b>                           | AB_566517  |
| <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 5µl of the suggested working dilution to label 10 <sup>6</sup> cells or 100µl whole blood  |
| <b>References</b>                     | <ol style="list-style-type: none"> <li>Jacobsen, C.N. <i>et al.</i> (1993) Reactivities of 20 anti-human monoclonal antibodies with leucocytes from ten different animal species. <a href="#">Vet Immunol Immunopathol. 39 (4): 461-6.</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>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>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>Bryan, S.A. <i>et al.</i> (2002) Responses of leukocytes to chemokines in whole blood and their antagonism by novel CC-chemokine receptor 3 antagonists. <a href="#">Am J Respir Crit Care</a></li> </ol> |

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**Further Reading**

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**Storage**

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1568A647>  
10041

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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA929A647\)](#)

### Recommended Useful Reagents

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

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

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