

## Datasheet: MCA6393F

|                      |                            |
|----------------------|----------------------------|
| <b>Description:</b>  | MOUSE ANTI HORSE CD14:FITC |
| <b>Specificity:</b>  | CD14                       |
| <b>Format:</b>       | FITC                       |
| <b>Product Type:</b> | Monoclonal Antibody        |
| <b>Clone:</b>        | 105                        |
| <b>Isotype:</b>      | IgG1                       |
| <b>Quantity:</b>     | 0.1 mg                     |

## 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 - 1/2         |

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.

|                                       |                                                                                               |                            |                          |
|---------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------|--------------------------|
| <b>Target Species</b>                 | Horse                                                                                         |                            |                          |
| <b>Product Form</b>                   | Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid                |                            |                          |
| <b>Max Ex/Em</b>                      | <b>Fluorophore</b>                                                                            | <b>Excitation Max (nm)</b> | <b>Emission Max (nm)</b> |
|                                       | FITC                                                                                          | 490                        | 525                      |
| <b>Preparation</b>                    | 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 0.1 mg/ml                                                                   |                            |                          |
| <b>Immunogen</b>                      | Recombinant equine CD14.                                                                      |                            |                          |

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>External Database Links</b> | <b>UniProt:</b><br><a href="#">Q9TTT3</a> <a href="#">Related reagents</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Fusion Partners</b>         | Spleen cells from immunized BALB/c mice were fused with cells of the X3.Ag8-653 myeloma cell line.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Specificity</b>             | <p><b>Mouse anti Horse CD14 antibody, clone 105</b> recognizes horse CD14.</p> <p>CD14 is a GPI-anchored membrane glycoprotein and monocyte/macrophage differentiation antigen. CD14 belongs to the lipopolysaccharide receptor family and is weakly expressed 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.</p> <p>Mouse anti Horse CD14 antibody, clone 105, will detect approx. 7.7% of horse PBMC (<a href="#">Kabithe <i>et al.</i> 2010</a>).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Flow Cytometry</b>          | Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>References</b>              | <ol style="list-style-type: none"> <li>Perkins, G.A. <i>et al.</i> (2014) Maternal T-lymphocytes in equine colostrum express a primarily inflammatory phenotype. <a href="#">Vet Immunol Immunopathol. 161 (3-4): 141-50.</a></li> <li>Ziegler, A. <i>et al.</i> (2016) Equine dendritic cells generated with horse serum have enhanced functionality in comparison to dendritic cells generated with fetal bovine serum. <a href="#">BMC Vet Res. 12 (1): 254.</a></li> <li>Larson, E.M. <i>et al.</i> (2020) Phenotype and function of IgE-binding monocytes in equine Culicoides hypersensitivity. <a href="#">PLoS One. 15 (5): e0233537.</a></li> <li>Raza, F. <i>et al.</i> (2021) Peripheral blood basophils are the main source for early interleukin-4 secretion upon in vitro stimulation with Culicoides allergen in allergic horses. <a href="#">PLoS One. 16 (5): e0252243.</a></li> <li>Tukia, E. <i>et al.</i> (2021) The Effect of Uterine Lavage on Soluble CD14, Chemokine Ligand 2, and Interleukin 10 Levels in Mares With Postpartum Metritis. <a href="#">J Equine Vet Sci. 98: 103365.</a></li> <li>Gressler, A.E. <i>et al.</i> (2022) Comprehensive Flow Cytometric Characterization of Bronchoalveolar Lavage Cells Indicates Comparable Phenotypes Between Asthmatic and Healthy Horses But Functional Lymphocyte Differences. <a href="#">Front Immunol. 13: 896255.</a></li> </ol> |
| <b>Further Reading</b>         | <ol style="list-style-type: none"> <li>Kabithe, E. <i>et al.</i> (2010) Monoclonal antibodies to equine CD14. <a href="#">Vet Immunol Immunopathol. 138 (1-2): 149-53.</a></li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Storage</b>                 | <p>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.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

---

|                  |                                 |
|------------------|---------------------------------|
| <b>Guarantee</b> | 12 months from date of despatch |
|------------------|---------------------------------|

---

|                                      |                                                                                                                                                                                        |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10041 available at:<br><a href="https://www.bio-rad-antibodies.com/SDS/MCA6393F">https://www.bio-rad-antibodies.com/SDS/MCA6393F</a><br>10041 |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

---

|                   |                            |
|-------------------|----------------------------|
| <b>Regulatory</b> | For research purposes only |
|-------------------|----------------------------|

---

|                                  |                                                                                                                                         |                  |                                                                                                                                                 |               |                                                                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>North &amp; South America</b> | Tel: +1 800 265 7376<br>Fax: +1 919 878 3751<br>Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a> | <b>Worldwide</b> | Tel: +44 (0)1865 852 700<br>Fax: +44 (0)1865 852 739<br>Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a> | <b>Europe</b> | Tel: +49 (0) 89 8090 95 21<br>Fax: +49 (0) 89 8090 95 50<br>Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a> |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)  
'M426432:240108'

**Printed on 21 Feb 2024**

---

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)