Datasheet: MCA1218F

| Description: | MOUSE ANTI PIG CD14:FITC |
| Specificity: | CD14 |
| Format: | FITC |
| Product Type: | Monoclonal Antibody |
| Clone: | MIL2 |
| Isotype: | IgG2b |
| Quantity: | 0.1 mg |

### RRID
AB_808387

### 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).

<table>
<thead>
<tr>
<th>Flow Cytometry</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
</tr>
</thead>
</table>

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
Pig

### Species Cross Reactivity
Reacts with: Human

**N.B.** Antibody reactivity and working conditions may vary between species.

### Product Form
Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

<table>
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<tr>
<th>Fluorophore</th>
<th>Excitation Max (nm)</th>
<th>Emission Max (nm)</th>
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<tbody>
<tr>
<td>FITC</td>
<td>490</td>
<td>525</td>
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### Preparation
Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

### Buffer Solution
Phosphate buffered saline

### Preservative Stabilisers
0.09% Sodium Azide (NaN₃)  
1% Bovine Serum Albumin

### Approx. Protein Concentrations
IgG concentration 0.1mg/ml.

### Immunogen
Porcine peripheral blood lymphocytes.
External Database Links

- UniProt: A2SW51
- Related reagents

Fusion Partners

Spleen cells from immunized Balb/c mice were fused with cells from the P2-X63-Ag.653 mouse myeloma.

Specificity

Mouse anti Pig CD14, clone MIL2 recognizes porcine CD14. Clone MIL2 was clustered as porcine CD14 at the Third International Workshop on Swine Leukocyte Differentiation Antigens (Haverson et al. 2001). Mouse anti Pig CD14, clone MIL2 immunoprecipitates a protein of ~50 kDa consistent with the expected apparent molecular weight of porcine CD14, and demonstrates the expected CD14 profile by dual labelling and competition studies. Further, pre-incubation of peripheral blood monocytes with MIL2 inhibits the binding of FITC labelled LPS, consistent with masking the CD14 LPS binding site (Thacker et al. 2001).

Mouse anti pig CD14, clone MIL2 demonstrates staining of both monocytes and neutrophils in peripheral blood by flow cytometry with a similar expression pattern to the anti human CD14 clone Tük4. Lymphocytes and eosinophils are negative for MIL2 staining (Zelnickova et al. 2007). Cloning and characterization of porcine CD14 indicates a high degree of both functional and structural conservation when compared to CD14 from other mammalian species, the gene maps to chromosome 2 and is expressed on a wide range of tissues in a manner consistent with expression on myeloid cells. (Petersen et al. 2007, Sanz et al. 2007).

Flow Cytometry

Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.

References


Further Reading


Storage

Store at +4°C or at -20°C if preferred.
Storage in frost-free freezers is not recommended.
This product should be stored undiluted.
This product is photosensitive and should be protected from light.
Avoid repeated freezing and thawing as this may denature the antibody.
Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

18 months from date of despatch.

Health And Safety Information

Material Safety Datasheet documentation #10041 available at:

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG2b NEGATIVE CONTROL:FITC (MCA691F)