Datasheet: MCA1973F

Product Details

RRID: AB_324137

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.

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

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species: Pig

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

Max Ex/Em

<table>
<thead>
<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 A from tissue culture supernatant

Buffer Solution: Phosphate buffered saline

Preservative Stabilisers

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<tr>
<td>0.09% Sodium Azide</td>
<td>1% Bovine Serum Albumin</td>
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Approx. Protein Concentrations: IgG concentration 0.1 mg/ml

Immunogen: Porcine alveolar macrophages.

Fusion Partners: Spleen cells from immunized mice were fused with P3X63-Ag8-653 murine myeloma cells (Kearney et al. 1979).
Specificity

Mouse anti Pig CD203a, clone PM18-7 recognizes porcine CD203a, originally clustered as SWC9 at the Second International Swine CD Workshop (Domínguez et al. 1998) and later identified as the porcine homologue of human ecto-nucleotidepyrophosphatase / phosphodiesterase 1 or ENPP1 (Petersen et al. 2007).

Mouse anti Pig CD203a was originally reported to immunoprecipitate two bands, one of ~205 kDa and one of ~130 kDa (Domínguez et al. 1998) under both reducing and non-reducing conditions. Subsequent studies suggest that CD203a migrates as a homodimer of ~260 kDa under non-reducing conditions and a 130 kDa monomer under reducing conditions (Petersen et al. 2007) from preparations of porcine alveolar macrophages.

CD203a is expressed widely in macrophage populations with notably high levels on alveolar macrophages (Petersen et al. 2007, Hwang et al. 2015). It is not expressed on monocyte populations (McCullough et al. 1997, Hwang et al. 2015).

SWC1a, expressed at very much higher levels on monocytes than mature macrophages and CD203a (SWC9), expressed exclusively on mature tissue macrophages have been used as markers of monocyte-macrophage differentiation (Sanchez et al. 1999).

Flow Cytometry

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

References

genes in blood monocytes between subclinically porcine circovirus type s (PCV2)-infected and PCV2-free pigs prior to and after lipopolysaccharide stimulation in vitro. 


17. Burkard, C. et al. (2017) Precision engineering for PRRSV resistance in pigs: Macrophages from genome edited pigs lacking CD163 SRCR5 domain are fully resistant to both PRRSV genotypes while maintaining biological function. 


Further Reading


Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. 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

Recommended Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

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