# Datasheet: MCA2312GA

## BATCH NUMBER 169035

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| **Description:** | MOUSE ANTI PIG CD172a |
| **Specificity:** | CD172a |
| **Other names:** | SWC3 |
| **Format:** | Purified |
| **Product Type:** | Monoclonal Antibody |
| **Clone:** | BL1H7 |
| **Isotype:** | IgG1 |
| **Quantity:** | 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.

| | Yes | No | Not Determined | Suggested Dilution |
|---|---|---|---|---|
| Flow Cytometry | ▪ | | | 1/10 - 1/20 |
| Immunohistology - Frozen | ▪ | | | |
| Immunohistology - Paraffin (1) | ▪ | | | |
| ELISA | | | ▪ | |
| Immunoprecipitation | ▪ | | | |
| Western Blotting (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.

(1) **This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.**

(2)**Clone BL1H7 recognizes porcine CD172a under non-reducing conditions.**

**Target Species**

Pig

**Product Form**

Purified IgG - liquid

**Preparation**

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

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| **Buffer Solution** | Phosphate buffered saline |
| **Preservative Stabilisers** | 0.09% sodium azide ($NaN_3$) |
| **Carrier Free** | Yes |
| **Approx. Protein Concentrations** | IgG concentration 1.0 mg/ml |
| **Immunogen** | Porcine alveolar macrophages. |
| **External Database Links** | **UniProt:**<br>Q5K4Q3 Related reagents |
| **Fusion Partners** | Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line. |
| **Specificity** | **Mouse anti Pig CD172a, clone BL1H7** recognizes porcine CD172a, a member of the signal regulatory protein (SIRP) family (Alvarez *et al.* 2000).<br><br>Mouse anti Pig CD172a, clone BL1H7 was originally clustered as SWC3 at the Third International Swine Cluster of Differentiation Workshop (Haverson *et al.* 2001;Thacker *et al.* 2001). CD172a is expressed on monocyte derived dendritic cells (MoDCs) (Facci *et al.* 2010) also conventional (cDCs), plasmacytoid (pDCs) DCs and blood DCs.(Facci; Jeong *et al.* 2010). Mouse anti Pig CD172a, clone BL1H7 immunoprecipitates a single band of ~90-110 kDa from preparations of biotinylated alveolar macrophages, a result confirmed by Western blotting analysis of alveolar macrophage lysates under non reducing conditions (Alvarez *et al.* 2000). Aberrant expression of CD172a has been noted on porcine leukemias (Sipos *et al.* 2006) with blast cells co-expressing lymphocytic markers CD5 and CD25 whilst expressing the Myeloid marker CD172a in a bi-phenotypic pattern as opposed to the more characteristic single population of CD172+ cells seen in normal blood PBMC (Chamorro *et al.* 2005).<br><br>Mouse anti Pig CD172a, clone BL1H7 has proved a useful and reliable tool for immunohistochemical analysis of routinely processed, formalin fixed, paraffin embedded porcine tissues (Domenech *et al.* 2003). |
| **Flow Cytometry** | Use 10µl of the suggested working dilution to $1x10^6$ cells in 100µl |
| **Histology Positive Control Tissue** | Porcine spleen |
| **Western Blotting** | Mouse anti Pig CD172a antibody, clone BL1H7 detects a band of approximately 90-115 kDa in alveolar macrophage lysates. |
| **References** | 1. Alvarez, B. *et al.* (2000) A porcine cell surface receptor identified by monoclonal antibodies to SWC3 is a member of the signal regulatory protein family and associates |

with protein-tyrosine phosphatase SHP-1. Tissue Antigens. 55 (4): 342-51.
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foot-and-mouth disease virus. Sci Rep. 11 (1): 16377.
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| **Further Reading** | 1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. Vet Res. 39: 54. |
| **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.<br><br>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. |
| **Guarantee** | 12 months from date of despatch |
| **Health And Safety Information** | Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2312GA |
| **Regulatory** | For research purposes only |

## Related Products

### Recommended Secondary Antibodies

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| Goat Anti Mouse IgG IgA IgM (STAR87...) | HRP |
| Goat Anti Mouse IgG (STAR70...) | FITC |
| Goat Anti Mouse IgG (STAR77...) | HRP |
| Goat Anti Mouse IgG (STAR76...) | RPE |
| Goat Anti Mouse IgG (H/L) (STAR117...) | Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP |
| Rabbit Anti Mouse IgG (STAR12...) | RPE |
| Rabbit Anti Mouse IgG (STAR13...) | HRP |
| Rabbit Anti Mouse IgG (STAR9...) | FITC |

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

## Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

**Product inquiries: www.bio-rad-antibodies.com/technical-support**

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M414390:221206'

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