

Mouse CD203a Monoclonal Antibody | anti-CD203a antibody

MOUSE ANTI PIG CD203a:FITC

CATALOG # AAA49078	HOST Mouse	APPLICATIONS Flow Cytometry, Functional Assay
------------------------------	----------------------	---

PRODUCT SYNONYMS

CD203a; Monoclonal Antibody; MOUSE ANTI PIG CD203a:FITC; anti-CD203a antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Number	PM18-7
Form/Format	FITC Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid
Concentration	IgG concentration 0.1 mg/ml (varies by lot)
Applicable Applications for anti-CD203a antibody	FCM/FACS (Flow Cytometry)
Perservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin Preparation
Buffer Solution	Phosphate buffered saline
Target Species	Pig
Preparation and Storage	Store at 4 degree C or at -20 degree 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. Shelf Life: 18 months from date of despatch.



Application Data

Staining of pig alveolar macrophages with Mouse anti Pig CD203a followed by Goat anti Mouse IgG:FITC



Application Data

Published customer image: Single colour flow cytometry analysis of changes in several immunologically relevant cell surface molecules of bone marrow-derived dendritic cells after 48 h of incubation with different PRRSV strains at a multiplicity of infection of 0.01 (as determined by titration in porcine alveolar macrophages). Grey histograms show cells stained with an irrelevant isotype-matched antibody and a secondary FITC or phycoerythrin conjugated antibody. Blue histograms show uninfected cells and red line histograms correspond to PRRSV-infected cells. Averages and variation coefficients are included. Grey values show the uninfected cell parameters and black values correspond to PRRSV-infected cells. A) SLA-I, SLA-II, CD80/86, CD14; B) SwC3, SwC9, CD163, CD16. From: Gimeno M, Darwich L, Diaz I, de la Torre E, Pujols J, Mart-n M, Inumaru S, Cano E, Domingo M, Montoya M, Mateu E. Cytokine profiles and phenotype regulation of antigen presenting cells by genotype-I porcine reproductive and respiratory syndrome virus isolates. Vet Res. 2011 Jan 18;42:9.



Application Data

Published customer image: Overview of flow cytometry analyses. (A) Gating strategy for identification of monocytes and macrophages. The peripheral blood is shown. Designation of population shown within each dot-plot is indicated above the dot-plot. Leukocytes were identified as viable (a) non-doublet (b) cells with typical light scatter properties of leukocytes (c). Then, macrophages were gated simply as CD203ahi leukocytes (d) and marked with blue color. Monocytes were gated as CD203alow/- SWC8-(e) CD172ahi(f) leukocytes where the CD203alow/- region was defined as the complementary region to the CD203ahi region. Then, SLA-DR+ monocytes were marked with red color and SLA-DR- monocytes were marked with green color (g). SLA-DR- region was defined as the complementary region to the SLA-DR+ region. Gating order is shown in the scheme (h). (B) Representative CD163 vs. CD14 dot-plots of macrophages (blue) and monocyte subpopulations (green: SLA-DR -, red: SLA-DR+) in various body compartments of control and APP-infected pigs. From: Ondrackova P, Leva L, Kucerova Z, Vicenova M, Mensikova M, Faldyna M. Distribution of porcine monocytes in different lymphoid tissues and the lungs during experimental Actinobacillus pleuropneumoniae infection and the role of chemokines. Vet Res. 2013 Oct 17;44:98.

ADDITIONAL INFORMATION

Related Product Information for anti-CD203a antibody	Mouse anti Pig CD203a, clone PM18-7 recognizes porcine CD203a, originally clustered as SWC9 at the Second International Swine CD Workshop (Dominguez et al. 1998) and later identified as the porcine homologue of human ecto-nucleotidepyrophosphatase / phosphodiesterase 1 or NPP1 (Petersen et al. 2007). Mouse anti Pig CD203a was originally reported to immunoprecipitate two bands, one of >205 kDa and one of ~130 kDa (Dominguez 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), it is not expressed on monocyte populations (McCullough et al. 1997). 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).
---	--

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.