

## ARG23368 anti-CD14 antibody [MIL2] (FITC)

Package: 50 µg  
Store at: 4°C

### Summary

Product Description	FITC-conjugated Mouse Monoclonal antibody [MIL2] recognizes CD14 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) . 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).
Tested Reactivity	Hu, Pig
Tested Application	FACS
Host	Mouse
Clonality	Monoclonal
Clone	MIL2
Isotype	IgG2b
Target Name	CD14
Species	Pig
Immunogen	Porcine peripheral blood lymphocytes.
Conjugation	FITC
Alternate Names	CD antigen CD14; Myeloid cell-specific leucine-rich glycoprotein; Monocyte differentiation antigen CD14

### Application Instructions

Application table	<table> <tr> <th>Application</th><th>Dilution</th></tr> <tr> <td>FACS</td><td>Assay-dependent</td></tr> </table>	Application	Dilution	FACS	Assay-dependent
Application	Dilution				
FACS	Assay-dependent				
Application Note	<p>FACS: Use 10 µl of the suggested working dilution to label 10<sup>6</sup> cells in 100 µl.</p> <p>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p>				

### Properties

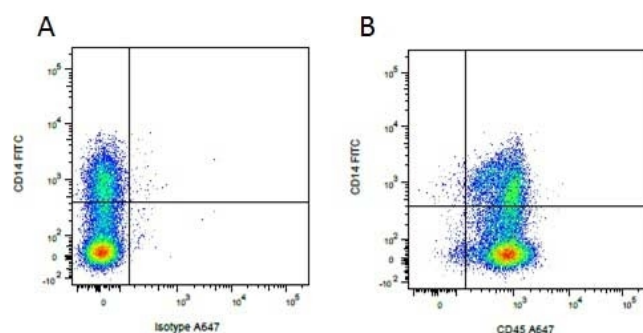
Form	Liquid
Purification	Purification with Protein G.

Buffer	PBS, 0.09% Sodium azide and 1% BSA.
Preservative	0.09% Sodium azide
Stabilizer	1% BSA
Concentration	0.1 mg/ml
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

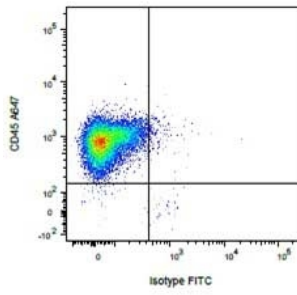
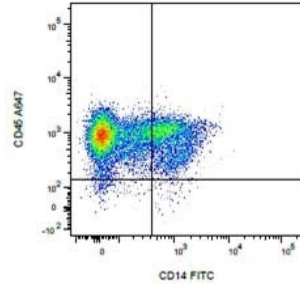
Gene Symbol	CD14
Gene Full Name	CD14 molecule
Background	The protein encoded by this gene is a surface antigen that is preferentially expressed on monocytes/macrophages. It cooperates with other proteins to mediate the innate immune response to bacterial lipopolysaccharide. Alternative splicing results in multiple transcript variants encoding the same protein. [provided by RefSeq, Mar 2010]
Function	In concert with LBP, binds to monomeric lipopolysaccharide and delivers it to the MD-2/TLR4 complex, thereby mediating the innate immune response to bacterial lipopolysaccharide (LPS). Acts via MyD88, TIRAP and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response. Up-regulates cell surface molecules, including adhesion molecules. [UniProt]
Research Area	Developmental Biology antibody; Immune System antibody; General Lymphocyte Marker Study antibody; Macrophages and neutrophils antibody
Calculated Mw	40 kDa
PTM	N- and O- glycosylated. O-glycosylated with a core 1 or possibly core 8 glycan. [UniProt]

## Images



ARG23368 anti-CD14 antibody [MIL2] (FITC) FACS image

Flow Cytometry: Figure A. ARG23368 anti-CD14 antibody [MIL2] (FITC) and A647 conjugated Mouse IgG1 isotype control. Figure B. ARG23368 anti-CD14 antibody [MIL2] (FITC) and A647 conjugated Mouse anti Porcine CD45. All experiments performed on red cell lysed Porcine blood gated on mononuclear cells.

**A****B**

#### ARG23368 anti-CD14 antibody [MIL2] (FITC) FACS image

Flow Cytometry: Figure A. A647 conjugated Mouse anti Porcine CD45 and FITC conjugated Mouse IgG2b isotype control. Figure B. A647 conjugated Mouse anti Porcine CD45 and ARG23368 anti-CD14 antibody [MIL2] (FITC). All experiments performed on red cell lysed Porcine blood gated on mononuclear cells.