Species Reactivity: Porcine/Equine

Specificity: Detects porcine CD14 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human CD14 and recombinant mouse CD14 is observed.

Source: Monoclonal Mouse IgG2B Clone # 433423

Purification: Protein A or G purified from hybridoma culture supernatant

Immunogen: E. coli-derived recombinant porcine CD14

Formulation: Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

*Small pack size (SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

Recommended Concentration Sample

Western Blot 1 μg/mL Recombinant Porcine CD14

Flow Cytometry 2.5 μg/10⁶ cells See Below

CyTOF-ready Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.

DATA

Detection of CD14 in Porcine PBMCs by Flow Cytometry. Porcine peripheral blood mononuclear cells were stained with Mouse Anti-Porcine/Equine CD14 Monoclonal Antibody (Catalog # MAB4597, filled histogram) or isotype control antibody (Catalog # MAB0041, open histogram), followed by Phycoerythrin-conjugated Anti-Mouse IgG F(ab')₂ Secondary Antibody (Catalog # F0102B).

Detection of CD14 in Equine PBMCs by Flow Cytometry. Equine peripheral blood mononuclear cells (PBMCs) treated with PMA and Calcium Ionomycin for 24 hours were stained with Mouse Anti-Porcine/Equine CD14 Monoclonal Antibody (Catalog # MAB4597, filled histogram) or isotype control antibody (Catalog # MAB004, open histogram), followed by Phycoerythrin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0102B).

PREPARATION AND STORAGE

Reconstitution: Reconstitute at 0.5 mg/mL in sterile PBS.

Shipping: The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

*Small pack size (SP) is shipped with polar packs. Upon receipt, store it immediately at 20 to 70 °C.

Stability & Storage: Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

CD14 is a 55 kDa GPI-linked cell surface glycoprotein that is preferentially expressed on monocytes/macrophages. It is a pattern recognition protein that acts as a receptor for lipopolysaccharide (LPS) and other microbial cell wall components. CD14 also occurs as a secreted protein. Mature porcine CD14 shares 70-75% aa identity with human, cow, sheep, water buffalo and horse CD14 and 61-62% aa identity with mouse and rat CD14.