SONY

Product Data Sheet

PerCP/Cyanine5.5 anti-human CD192 (CCR2)

Catalog # / Size: 2386020 / 100 tests
2386015 / 25 tests

Clone: K036C2

Isotype: Mouse IgG2a, κ

Immunogen: CCR2 DNA immunogen

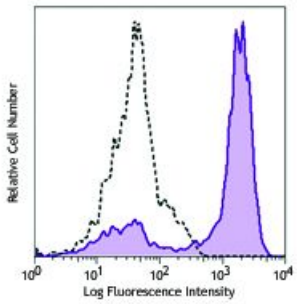
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with PerCP/Cy5.5 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

Workshop Number: HCDM listed

Concentration: Lot-specific



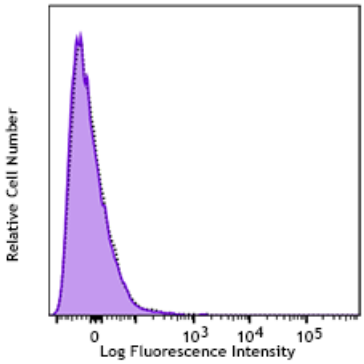
Human peripheral blood monocytes were stained with CD192 (CCR2, clone K036C2) PerCP/Cy5.5 (filled histogram) or mouse IgG2a, κPerCP/Cy5.5 isotype control (open histogram).

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells or 5 µl per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.



HLA-A2 negative human peripheral blood lymphocytes were stained with anti-human HLA-A2 (clone BB7.2) PE/Dazzle™ 594 (filled histogram) or mouse IgG2b, κ PE/Dazzle™ 594 isotype control (open histogram).

Application References:

1. Shen J, *et al.* 2014. *J Leukoc Biol.* 96:563. PubMed
2. Barrow AD, *et al.* 2015. *J Immunol.* 194:3317. PubMed

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Description: CCR2 is a chemokine receptor that binds monocyte chemoattractant proteins (MCP-1, 2, 3 and 4). Two spliced variants were initially described for CCR2 (CCR2A and CCR2B). These variants differ in their terminal carboxyl tails. Monocyte adhesion to the arterial endothelium and subsequent migration into the intima are central events in the pathogenesis of atherosclerosis. CCR2 and MCP-1 have been associated to atherosclerotic plaques. MCP-1 is induced by modified-LDL in endothelial cells and may trigger firm adhesion of monocytes to vascular endothelium under flow conditions. Local overexpression of MCP-1 at vessel walls induces infiltration of macrophages and formation of atherosclerotic lesions. Obesity induces an inflammatory state that is implicated in many clinically important complications, including insulin resistance, diabetes, atherosclerosis, and non-alcoholic fatty liver disease. CCR2 influences the development of obesity and associated adipose tissue inflammation.

Antigen References:

1. Wong LM, *et al.* 1997. *J. Biol. Chem.* 272:1038.
2. Papadopoulou C, *et al.* 2008. *Cytokine* 43:181.
3. Barlic J, *et al.* 2007. *J. Leukoc. Biol.* 82:226.
4. Gu L, et al. 1998. *Mol. Cell* 2:275.
5. Volpe S, *et al.* 2012. *PLoS One.* 7:e37208.

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