

**Brilliant Violet 421™ anti-human CD192 (CCR2)**

**Catalog # / Size:** 2386045 / 25 tests  
2386050 / 100 tests

**Clone:** K036C2

**Isotype:** Mouse IgG2a,  $\kappa$

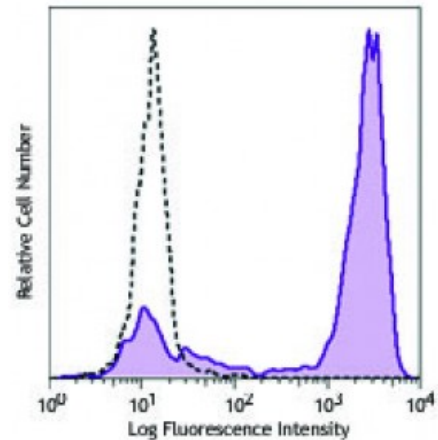
**Immunogen:** CCR2 DNA immunogen

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.

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

**Concentration:** Lot-specific



Human peripheral blood monocytes were stained with CD192 (clone K036C2) Brilliant Violet 421™ (filled histogram) or mouse IgG2a,  $\kappa$  Brilliant Violet 421™ 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  $\leq 5$  microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

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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.*