SONY

Product Data Sheet

Brilliant Violet 711™ anti-human CD192 (CCR2)

Catalog # / Size: 2386155 / 25 tests
2386160 / 100 tests

Clone: K036C2

Isotype: Mouse IgG2a, κ

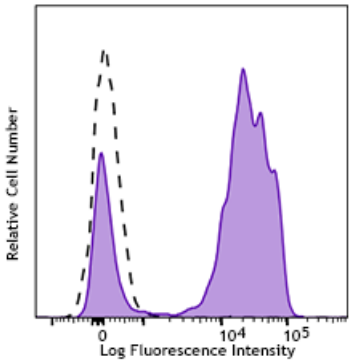
Immunogen: CCR2 DNA immunogen

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 711™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 711™ 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 711™ (filled histogram) or mouse IgG2a, κ Brilliant Violet 711™ 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 in 100 µl staining volume or 5 µl per 100 µl of whole blood.

Brilliant Violet 711™ excites at 405 nm and emits at 711 nm. The bandpass filter 710/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 711™ is a trademark of Sirigen Group Ltd.

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Application References:

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.