Product Data Sheet

APC/Fire™ 750 anti-human CD196 (CCR6)

Catalog # / 2367215 / 100 tests

Size: 2367210 / 25 tests

Clone: G034E3

Isotype: Mouse IgG2b, κ

Immunogen: CCR6-transfected cells

Reactivity: Human, Non-human primate, Other

Preparation: The antibody was purified by affinity

chromatography and conjugated with

APC/Fire™ 750 under optimal

conditions.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Workshop Number: **HCDM** listed

Concentration: Lot-specific

Human peripheral blood lymphocytes were stained with CD19 FITC and CD196 (clone G034E3) APC/Fire™ 750 (left) or Mouse IgG2b, κ isotype control

APC/Fire™ 750 (right).

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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 μ L per million cells in 100 μ L staining volume or 5 μ L per 100 μ L of whole blood.

* APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum

emission of 787 nm.

Application Notes:

Additional reported applications (for the relevant formats) include: Western

blotting¹, immunofluorescence², and immunoprecipitation¹.

Application References:

Hildreth JE, et al. 1991. Blood 77:121. (IP, WB)
Beatty WL, et al. 2006. J. Cell Sci. 119:350. (IF)

Description:

CCR6, also known as CD196, is a chemokine receptor that is expressed on immature dendritic cells, B lymphocytes, and memory T cells. CCR6 binds CCL20, although members of the β defensin family also bind CCR6 with a lower affinity. CCR6 positive cells, and its ligand CCL20, have been detected in numerous organs, especially the secondary lymphoid organ. CCL20 is selectively made by the follicle-associated epithelium (FAE) overlying Peyers Patches (PPs) and isolated lymphoid follicles (ILFs). CCL20 contributes to the recruitment of CCR6-expressing B cells to these structures. In humans, CCR6 can function to mediate arrest of T cells on dermal endothelial cells and is highly expressed on T cells resident in both normal and psoriatic skin. CCR6 and/or CCL20 have been implicated in the pathogenesis of rheumatoid arthritis and inflammatory bowel disease. Human T cells that are able to produce IL-17 express CCR6. It suggests that CCL20 and CCR6 have a role in inflammatory diseases by recruiting Th17 cells to target tissues.

Antigen **References:**

- 1. Zaballos A, et al. 1996. Biochem. Bioph. Res. Co. 227:846.
- 2. Yang D, et al. 1999. Science 286:525.
- 3. MacDonald KG, et al. 2007. *Am. J. Pathol.* 170:1229. 4. Homey B, et al. 2000. *J. Immunol.* 164:6621. 5. Hirota K, et al. 2007. *J. Exp. Med.* 204:2803.
- 6. Singh SP, et al. 2008. J. Immunol. 180:214.