## **Product Data Sheet**

## Pacific Blue™ anti-human CD196 (CCR6)

Catalog # / 2367190 / 25 tests

Size: 2367195 / 100 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

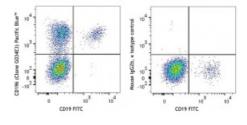
Pacific Blue<sup>™</sup> under optimal conditions. The solution is free of unconjugated Pacific Blue™.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

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

Concentration: Lot-specific



Human peripheral lymphocytes were stained with CD19 FITC and CD196 (clone G034E3) Pacific Blue™ (left) or mouse IgG2b, κ Pacific Blue<sup>™</sup> isotype control

(right).

## **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.

\* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

**Application References:** 

**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  $\beta$  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.