

## Anti-Human CD184 (CXCR4) PE

Catalogue Number : 16911-60

RUO: For Research Use Only. Not for use in diagnostic procedures.

### Product Information

**Clone:** 12G5

**Format/Conjugate:** PE

**Concentration:** 5 uL/test

**Reactivity:** Human

**Laser:** Blue (488nm)

**Peak Emission:** 578nm

**Peak Excitation:** 496nm

**Filter:** 585/40

**Brightness (1=dim,5=brightest):** 5

**Isotype:** Mouse IgG2a, kappa

**Formulation:** Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, pH7.2.

**Storage:** Product should be kept at 2-8°C and protected from prolonged exposure to light.

**Applications:** FC

### Description

The 12G5 monoclonal antibody specifically bind to human CD184 (CXCR4), a seven-transmembrane G-protein-coupled receptor. It is widely expressed on endothelial cells, hematopoietic cells, and also on naïve T cell subsets. CD184 is the receptor for SDF-1 and an alternative receptor for HIV-1. The 12G5 antibody is reported to inhibit SDF-1 induced chemotaxis and calcium influx and some CD4-dependent infections of HIV-1.

### Preparation & Storage

The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.

### Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. The antibody can be used at less than or equal to 5 µL per test. A test is the amount of antibody required to stain a cell sample in the final volume of 100 µL.

### References

1. Bleul, C. C., Wu, L., Hoxie, J. A., Springer, T. A., ; Mackay, C. R. (1997). The HIV coreceptors CXCR4 and CCR5 are differentially expressed and regulated on human T lymphocytes.; *Proceedings of the National Academy of Sciences*, 94(5), 1925-1930.
2. Feng, Y., Broder, C. C., Kennedy, P. E., ; Berger, E. A. (1996). HIV-1 entry cofactor: functional cDNA cloning of a seven-transmembrane, G protein-coupled receptor.; *Science*, ;272(5263), 872-877.
3. Simmons, G., Wilkinson, D., Reeves, J. D., Dittmar, M. T., Beddows, S., Weber, J., ... ; Clapham, P. R. (1996). Primary, syncytium-inducing human immunodeficiency virus type 1 isolates are dual-tropic and most can use either Lestr or CCR5 as coreceptors for virus entry.; *Journal of Virology*, ;70(12), 8355-8360.