

Anti-Human CD184 (CXCR4) APC

Catalog Number :16911-80

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

Product Information

Clone: 12G5

Format/Conjugate: APC

Concentration: 5uL(1.0ug)/test

Reactivity: Human

Laser: Red (635 -655nm)

Peak Emission: 660nm

Peak Excitation: 650nm

Filter: 660/20

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.