

Anti-Mouse CD289 (TLR9) FITC

Catalogue Number : 31912-50

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

Product Information

Clone: M9.D6

Format/Conjugate: FITC

Concentration: 0.5 mg/mL

Reactivity: Mouse

Laser: Blue (488nm)

Peak Emission: 520nm

Peak Excitation: 494nm

Filter: 530/30

Brightness (1=dim,5=brightest): 3

Isotype: Rat IgG2a

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 M9.D6 monoclonal antibody specifically reacts with mouse CD289 also known as toll-like receptor 9 (TLR9). CD289 is involved in the activation of innate immunity, in acquired immune responses, and autoimmune diseases. It is involved in the immune system's response to unmethylated CpG dinucleotide sequences such as those found in bacterial, viral, or synthetic DNA. CD289 assists in pathogen recognition and is expressed by subtypes of dendritic cells and B cells.

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. For flow cytometric staining, the suggested use of this reagent is ≤0.5 ug per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

References

1. Kubo, T., Uchida, Y., Watanabe, Y., Abe, M., Nakamura, A., Ono, M., ... ; Takai, T. (2009). Augmented TLR9-induced Btk activation in PIR-B;deficient B-1 cells provokes excessive autoantibody production and autoimmunity. *The Journal of experimental medicine*, 206(9), 1971-1982.
2. Fukata, M., Breglio, K., Chen, A., Vamadevan, A. S., Goo, T., Hsu, D., ... ; Abreu, M. T. (2008). The myeloid differentiation factor 88 (MyD88) is required for CD4+ T cell effector function in a murine model of inflammatory bowel disease. *The Journal of Immunology*, 180(3), 1886-1894.
3. Miranda-Hernandez, S., Gerlach, N., Fletcher, J. M., Biros, E., Mack, M., Körner, H., ; Baxter, A. G. (2011). Role for MyD88, TLR2 and TLR9 but not TLR1, TLR4 or TLR6 in experimental autoimmune encephalomyelitis. *The Journal of Immunology*, 187(2), 791-804.