

Anti-Mouse LPAM-1 APC

Catalog Number :83212-80

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

Product Information

Clone: DATK32

Format/Conjugate: APC

Concentration: 0.2 mg/mL

Reactivity: Mouse

Laser: Red (635 -655nm)

Peak Emission: 660nm

Peak Excitation: 650nm

Filter: 660/20

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

Isotype: Rat 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 DATK32 monoclonal antibody specifically reacts with an epitope of the Mouse $\alpha 4 \beta 7$ integrin (LPAM-1). The two subunits of the LPAM-1 heterodimer are the 154 kDa $\alpha 4$ and the 130 kDa $\beta 7$. Most mature lymphocytes, a subset of bone marrow cells, and some of the thymic cells express the $\alpha 4 \beta 7$ integrin heterodimer. $\alpha 4 \beta 7$ enhances the transendothelial migration of lymphocytes, and interacts with several ligands (fibronectin, CD106, and MAdCAM-1). The interaction of DATK32 with the $\alpha 4 \beta 7$ induces the $\alpha 4 \beta 7$ -dependent lymphocyte aggregation and inhibits LPAM-1-mediated cell adhesion.

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 ≤0.25 ug per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

References

1. Andrew, D. P., Berlin, C., Honda, S., Yoshino, T., Hamann, A., Holzmann, B., ... Butcher, E. C. (1994). Distinct but overlapping epitopes are involved in $\alpha 4 \beta 7$ -mediated adhesion to vascular cell adhesion molecule-1, mucosal addressin-1, fibronectin, and lymphocyte aggregation.; *The Journal of Immunology*, 153(9), 3847-3861.
2. Berlin, C., Berg, E. L., Briskin, M. J., Andrew, D. P., Kilshaw, P. J., Holzmann, B., ... Butcher, E. C. (1993). $\alpha 4 \beta 7$ integrin mediates lymphocyte binding to the mucosal vascular addressin MAdCAM-1.; *Cell*, 74(1), 185-195.
3. Rivera-Nieves, J., Olson, T., Bamias, G., Bruce, A., Solga, M., Knight, R. F., ... Ley, K. (2005). L-selectin, $\alpha 4 \beta 1$, and $\alpha 4 \beta 7$ integrins participate in CD4+ T cell recruitment to chronically inflamed small intestine.; *The Journal of Immunology*, 174(4), 2343-2352.