PE/Cy7 anti-mouse TIGIT (Vstm3)

Catalog # / Size: 1310540 / 100 µg
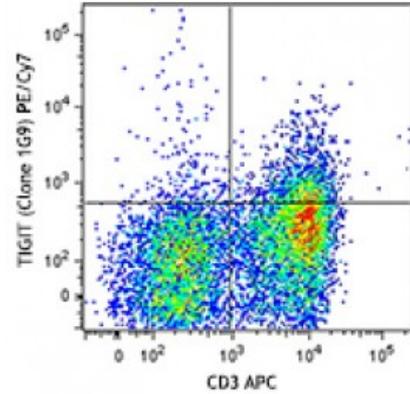1310535 / 25 µg

Clone: 1G9

Isotype: Mouse IgG1, κ

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.2

Con-A stimulated C57BL/6 mouse splenocytes (three days) were stained with CD3 APC and TIGIT (clone 1G9) APC (top) or mouse IgG1, κ APC isotype control (bottom).

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 ≤0.25 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.
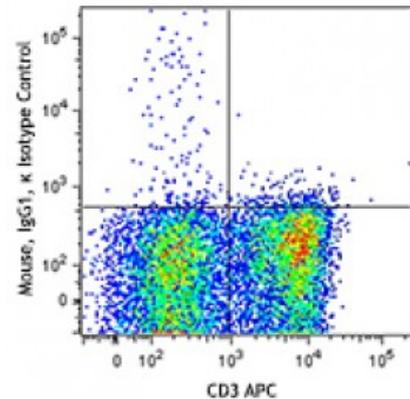
Application References: 1. Joller N, *et al.* 2010. *J. Immunol.* 186:1338.

Description: T cell immunoreceptor with Ig and ITIM domains (TIGIT), also known as V-set and transmembrane domain-containing protein 3 (Vstm3), is a 26 kD, type I transmembrane protein and member of the CD28 family. TIGIT is expressed on activated T cells, follicular T helper, memory, and regulatory T cells as well as on NK cells. Its binding partners include CD155 (PVR) and CD112 (PVRL2). TIGIT is a negative regulator of NK and T cell activation. Engagement of TIGIT by dendritic cells results in their differentiation into a tolerogenic phenotype, with an increased secretion of IL-10 and a diminished production of IL-12. Mice deficient for TIGIT are more susceptible to autoimmune disease.

Antigen References: 1. Levin SD, *et al.* 2011. *Eur. J. Immunol.* 41:902.
2. Yu X, *et al.* 2009. *Nat. Immunol.* 10:48.
3. Stanietsky N, *et al.* 2009. *P. Natl. Acad. Sci. USA* 106:17858.