SONY

Product Data Sheet

PE anti-mouse PIR-A/B

Catalog # / Size: 1320515 / 25 µg
1320520 / 100 µg

Clone: 6C1

Isotype: Rat IgG1, κ

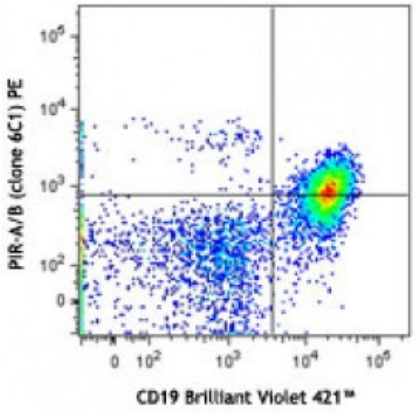
Immunogen: Recombinant extracellular domains 1 and 2 of PIR-A

Reactivity: Mouse

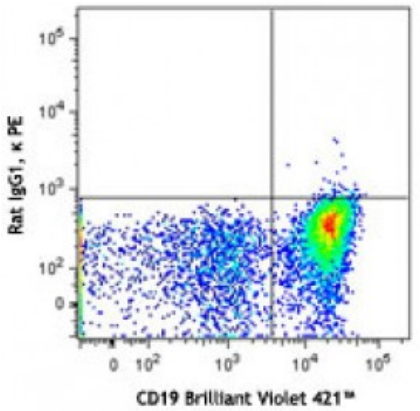
Preparation: The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.

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

Concentration: 0.2



C57BL/6 mouse splenocytes were stained with CD19 Brilliant Violet 421™ and PIR-A/B (clone 6C1) PE (top) or rat IgG1, κ PE 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 ≤0.125 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Additional reported applications for the relevant formats include: Western Blotting1 and immunohistochemical staining of frozen tissue sections3.

Application References:

1. Kubagawa H, *et al.* 1999. *J. Exp. Med.* 189:309. (WB)
2. Nakamura A, *et al.* 2004. *Nat. Immunol.* 5:623. (FC)
3. Masuda K, *et al.* 2005. *EMBO J.* 24:4052. (IHC)

Description: Paired-immunoglobulin-like receptor (PIR) is a type I transmembrane protein, containing six Ig-like domains. Two isoforms (PIR-A and PIR-B) have been reported for this molecule. PIR-A/B is expressed on B cells, mast cells, macrophages, granulocytes, eosinophils, and dendritic cells. PIR-A requires association with FcRγc for its cell surface expression and to act as an activating receptor. The ligand for PIR-A is MHC class I. PIR-B is an inhibitory receptor with 3 ITIM motifs on its cytoplasmic tail; when phosphorylated, they recruit the tyrosine phosphatases PTPN6/SHP-1 and PTPN11/SHP-2. MHC class I, Nogo, MAG, and OMgp are the ligands for PIR-B.

Antigen References:

1. Matsushita H, *et al.* 2011. *J. Biol. Chem.* 286:25739.
2. Arita K, *et al.* 2011. *J. Immunol.* 186:7050.

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3. Takai T, *et al.* 2011. *J. Biomed. Biotechnol.* 2011:275302.
4. Nakamura A,