SONY

Product Data Sheet

PerCP anti-mouse CD43 Activation-Associated Glycoform

Catalog # / Size: 1206110 / 100 µg

Clone: 1B11

Isotype: Rat IgG2a, κ

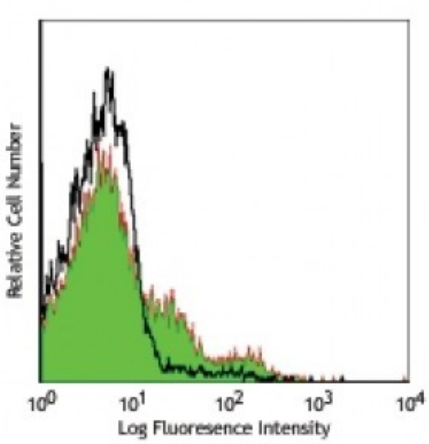
Immunogen: Mouse WEHI 274.3 myeloid tumor cells

Reactivity: Mouse

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

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

Concentration: 0.2



Balb/c mouse splenocytes stained with 1B11 PerCP

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 ≤ 1.0 microg per 10^6 cells in 100 microL. It is recommended that the reagent be titrated for optimal performance for each application.

* PerCP has a maximum absorption of 482 nm and a maximum emission of 675 nm.

Application Notes: Additional reported applications (for the relevant formats) include: immunoprecipitation[1,2], Western blotting[1,2], and immunohistochemistry of acetone-fixed frozen sections.

Application References:

1. Jones AT, *et al.* 1994. *J. Immunol.* 153:3426. (IP, WB)
2. Carlow DA, *et al.* 1999. *J. Immunol.* 163:1441. (IP, WB)
3. Onami TM, *et al.* 2002. *J. Immunol.* 168:6022.
4. van der Most RG, *et al.* 2003. *Intl. Immunol.* 15:119.
5. Chu VT, *et al.* 2007. *J. Immunol.* 179:5947.
6. Lang A, *et al.* 2008. *J. Immunol.* 180:4848. PubMed
7. Gibbert K, *et al.* 2010. *J. Immunol.* 185:6179. PubMed

Description: CD43, also known as Ly-48, Leukosialin, Sialophorin, Leukocyte Sialoglycoprotein, and gp115, is a large single chain of type I transmembrane glycoprotein with abundant O-glycosylation and sialylation sites. Due to variable glycosylation and sialylation, two isoforms of CD43 have been identified. The 115 kD glycoform of CD43 is expressed on most hematopietic cells including T lymphocytes, NK cells, monocytes, granulocytes, platelets, and $CD5^+$ B cells. It is not present on resting B cells and erythrocytes. While the 130 kD glycoform is thought to be activation-associated form primarily expressed on myeloid cells, pre-B cells, and activated T cells. It has been reported that CD43 binds to CD54 and Siglec-1. CD43 plays dual roles in cell adhesion and anti-adhesion, as well as costimulation of T cell activation and survival, and induction of apoptosis of T cells and hematopoietic progenitors. The 1B11 antibody reacts with the activation-associated glycoform of CD43. The epitope recognized by 1B11 is also shared with desialylated CD45RB.

This antibody is useful for differentiation of effector CD8 T cells and memory T cells.

Antigen References:

1. van den Berg TK, *et al.* 2001. *J. Immunol.* 166:3637.
2. Moore T, *et al.* 1994. *J. Immunol.* 153:4978.
3. Onami TM, *et al.* 2002. *J. Immunol.* 168:6022.
4. Tong J, *et al.* 2004.