Alexa Fluor® 647 anti-mouse CD43 Activation-Associated Glycoform

Catalog # / Size: 1206060 / 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

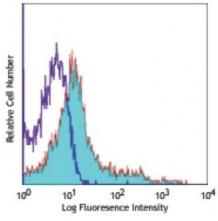
chromatography, and conjugated with Alexa Fluor® 647 under optimal

conditions.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.5



C57BL/6 mouse splenocytes stained with 1B11 Alexa Fluor® 647

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.

* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 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. <u>PubMed</u> 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

Antigen References:

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