## SONY

## **Product Data Sheet**

## **Biotin anti-mouse CD43 Activation-Associated Glycoform**

| Catalog # / Size:     | 1206020 / 200 μg   |
|-----------------------|--|
| Clone:                | 1B11   |
| Isotype:              | Rat IgG2a, к   |
| Immunogen:            | Mouse WEHI 274.3 myeloid tumor cells   |
| Reactivity:           | Mouse  |
| Preparation:          | The antibody was purified by affinity<br>chromatography, and conjugated with<br>biotin under optimal conditions. The<br>solution is free of unconjugated biotin. |
| Formulation:          | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.  |
| <b>Concentration:</b> | 0.5  |



C57BL/6 mouse splenocytes stained with biotinylated 1B11, followed by Sav-PE

## **Applications:**

| Applications:              | Flow Cytometry, Immunohistochemistry   |
|----------------------------|--|
| Recommended<br>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 $\leq 0.25$ microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.  |
| Application<br>Notes:      | Additional reported applications (for the relevant formats) include: immunoprecipitation <sup>1,2</sup> , Western blotting <sup>1,2</sup> , and immunohistochemistry of acetone-fixed frozen sections.   |
| Application<br>References: | <ol> <li>Jones AT, <i>et al.</i> 1994. <i>J. Immunol.</i> 153:3426. (IP, WB)</li> <li>Carlow DA, <i>et al.</i> 1999. <i>J. Immunol.</i> 163:1441. (IP, WB)</li> <li>Onami TM, <i>et al.</i> 2002. <i>J. Immunol.</i> 168:6022.</li> <li>van der Most RG, <i>et al.</i> 2003. <i>Intl. Immunol.</i> 15:119.</li> <li>Chu VT, <i>et al.</i> 2007. <i>J. Immunol.</i> 179:5947.</li> <li>Lang A, <i>et al.</i> 2008. <i>J. Immunol.</i> 180:4848. PubMed</li> <li>Gibbert K, <i>et al.</i> 2010. <i>J. Immunol.</i> 185:6179. PubMed</li> </ol> |

**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<sup>+</sup> 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

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