

**Alexa Fluor® 700 anti-mouse CD43**

**Catalog # / Size:** 1316070 / 100 µg  
1316065 / 25 µg

**Clone:** S11

**Isotype:** Rat IgG2b

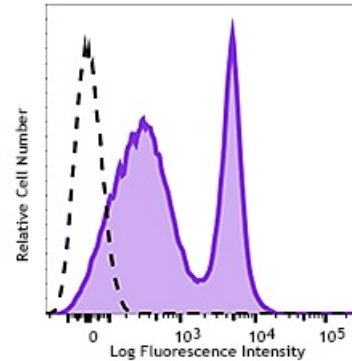
**Immunogen:** Mouse plasmacytoma cells

**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 700 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 700.

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

**Concentration:** 0.5 mg/ml



C57BL/6 mouse splenocytes were stained with anti-mouse CD43 (clone S11) Alexa Fluor® 700 (filled histogram) or rat IgG2b Alexa Fluor® 700 isotype control (open histogram).

**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 ≤ 0.5 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

\* Alexa Fluor® 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor® 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

**Application Notes:** Additional reported applications (for the relevant formats) include: Western blotting<sup>3</sup>. The S11 antibody reacts with pan-CD43.

- Application References:**
1. Gaspari AA, *et al.* 1993. *J. Invest. Dermatol.* 100:247. (FC)
  2. Merzaban JS, *et al.* 2005. *J. Immunol.* 174:4051. (FC)
  3. Baecher-Allan CM, *et al.* 1993. *Immunogenetics.* 37:183. (WB)

**Description:** CD43, also known as Leukosialin and Ly48, is a 125 kD sialoprotein (glycosylated protein) expressed from 1.2 kBase mRNA in bone marrow-derived cells. This occurs early in development. Cells expressing CD43 include γ/δ T cells, macrophages, mature B cells, and dendritic cells. CD43 functions as an anti-adhesive surface molecule, promoted by antibody cross-linking, that releases the trailing edge of the cell during locomotion to allow movement of the cell body towards the lamellipodia. The intracellular distribution of CD43 is determined by binding to moesin, an intracellular membrane protein, which is in-turn bound in some manner to the actin cytoskeleton. Defects with CD43 function and expression retard cellular locomotion, resulting in a wide range of immune disorders. Wiscott-Alderich syndrome, and the varying degrees of its severity, is related to the dysregulation of CD43 expression.

- 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. *J. Exp. Med.* 199:1277.
  5. Jones AT, et al. 1994. *J. Immunol.* 153:3426.
  6. Matsumoto M, et al. 2005. *J. Immunol.* 175:8042.