Product Data Sheet

PE/Dazzle™ 594 anti-mouse CD43

Catalog # / 1316085 / 25 μg

Size: 1316090 / 100 µg

Clone: S11

Isotype: Rat IgG2b

Immunogen: Mouse plasmacytoma cells

Reactivity: Mouse

Preparation: The antibody was purified by affinity

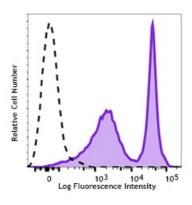
chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and

unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.2 mg/ml



C57BL/6 mouse splenocytes were stained with anti-mouse CD43 (clone S11) PE/Dazzle™ 594 (filled

histogram) or rat IgG2b

PE/Dazzle™ 594 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 $\leq 0.25~\mu g$ per million cells in 100 μl volume. It is recommended that the reagent be titrated for optimal performance for each

application.

* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum

emission of 610 nm.

Application Notes:

Additional reported applications (for the relevant formats) include: Western

blotting³. 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.