## **Product Data Sheet**

C57BL/6 mouse splenocytes were

stained with anti-mouse CD3E APC and anti-mouse CD8a

recombinant (clone QA17A07)

Spark YG<sup>™</sup> 593 (left) or antimouse CD3ε APC only (right).

## Spark YG<sup>™</sup> 593 anti-mouse CD8a Recombinant

Catalog # / 1375120 / 100 µg

Size: 1375115 / 25 µg

Clone: QA17A07

Mouse IgG1, ĸ Isotype:

Immunogen: Mouse thymus or spleen

Reactivity: Mouse

Preparation: The antibody was purified by affinity

chromatography and conjugated with

Spark YG<sup>™</sup> 593 under optimal

conditions.

Phosphate-buffered solution, pH 7.2, Formulation:

containing 0.09% sodium azide

**Concentration:** 0.5 mg/mL

## **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  $\leq 0.5 \,\mu g$  per million cells in 100  $\mu L$  volume. It is recommended that the reagent be titrated for optimal performance for each application.

\* Spark YG™ 593 has a maximum excitation of 573 nm and a maximum emission of 593 nm.

Description:

CD8, also known as Lyt-2, Ly-2, or T8, consists of disulfide-linked  $\alpha$  and  $\beta$ chains that form the  $\alpha(CD8a)/\beta(CD8b)$  heterodimer and  $\alpha/\alpha$  homodimer. CD8a is a 34 kD protein that belongs to the immunoglobulin family. The CD8  $\alpha/\beta$ heterodimer is expressed on the surface of most thymocytes and a subset of mature TCR  $\alpha/\beta$  T cells. CD8 expression on mature T cells is non-overlapping with CD4. The CD8  $\alpha/\alpha$  homodimer is expressed on a subset of  $\gamma/\delta$  TCRbearing T cells, NK cells, intestinal intraepithelial lymphocytes, and lymphoid dendritic cells. CD8 is an antigen co-receptor on T cells that interacts with MHC class I on antigen-presenting cells or epithelial cells. CD8 promotes T cell activation through its association with the TCR complex and protein tyrosine kinase lck.

**Antigen** References:

- 1. Barclay AN, Brown MH. 1997. Biochem. Soc. Trans. 25:224-8.
- 2. Zamoyska R. 1994. Immunity 1:243.
- 3. Ellmeier W, et al. 1999. Annu. Rev. Immunol. 17:523.