

## CFluor<sup>®</sup> R840 Anti-Human CD8 (SK1)

PRODUCT DETAILS	
<b>Catalog Number:</b>	R7-20235 (100 tests) R7-20236 (25 tests)
<b>Reactivity:</b>	Human, Chimpanzee, Cynomolgus, Pigtailed Macaque, Rhesus, Sooty Mangabey
<b>Clone:</b>	SK1
<b>Format:</b>	CFluor <sup>®</sup> R840 <sup>1</sup>
<b>Isotype:</b>	Mouse IgG1, $\kappa$
<b>Volume Per Test:</b>	5 $\mu$ L / test
<b>Application:</b>	Flow cytometry
<b>Formulation:</b>	Phosphate-buffered saline, pH 7.2, containing 0.09% sodium azide and 0.2% BSA (BSA Country of Origin USA)
<b>Storage:</b>	2-8°C and protected from light. <b>Do not freeze</b>

### PRODUCT DESCRIPTION

The SK1 monoclonal antibody binds to human CD8a, a 32-34-kDa type I glycoprotein that forms either as an  $\alpha/\alpha$  homodimer or  $\alpha/\beta$  heterodimer with its isoform CD8b. CD8 is found on thymocytes, a subset of peripheral blood T cells, majority expressing  $\alpha/\beta$  heterodimer, and NK cells, majority expressing  $\alpha/\alpha$  homodimer<sup>1</sup>. CD8 plays a role in antigen recognition and class I MHC-restricted T cell development. CD8 functions are associated with two domains of CD8a. CD8a ectodomain binding to the  $\alpha 3$  domain of MHC class I increases the adhesion between CD8<sup>+</sup> T lymphocytes and target cells. The cytoplasmic tail binding to the tyrosine kinase p56<sup>lck</sup> contributes to signal transduction and T cell activation<sup>2,3</sup>. The antibody was conjugated to a fluorophore and purified by affinity chromatography.

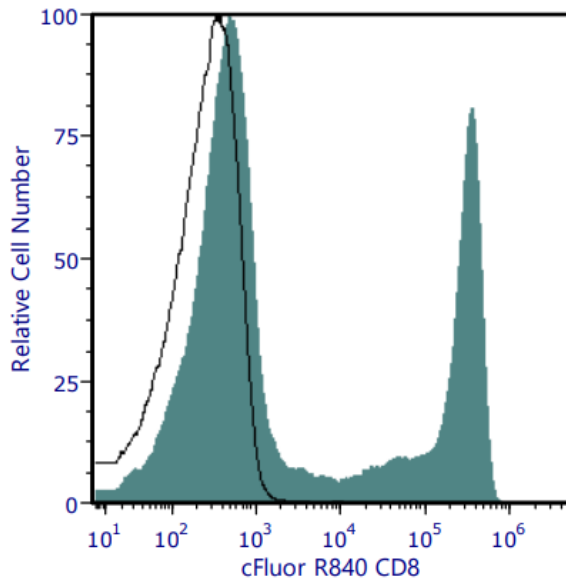
### RECOMMENDED USAGE

Each lot of this antibody is quality control tested using flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5  $\mu$ L per 1 million cells in a staining volume of 100  $\mu$ L. If whole blood is analyzed, then use 5  $\mu$ L per 100  $\mu$ L. It is recommended that users titrate the antibody to obtain the optimal result for their specific application.

Please briefly centrifuge the reagent vial before use.

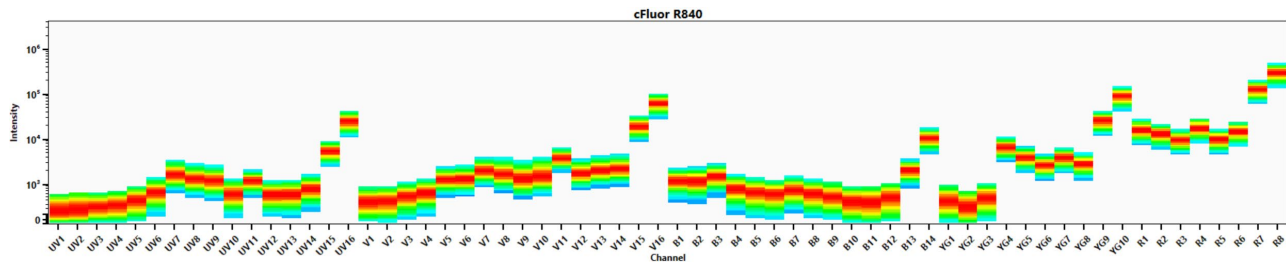
Use appropriate personal protective equipment per the product safety data sheet when using this product.

PRODUCT DATA



Human peripheral blood was stained with cFluor® R840 Anti-Human CD8 (clone SK1) (filled histogram) or cFluor® R840 mouse IgG1, κ isotype control (open histogram). Data shown is gated on lymphocytes.

Spectral signature of cFluor® R840 from a Cytex® Aurora 5 laser system equipped with 355, 405, 488, 561 and 640 nm lasers using CytexAssaySetting.



REFERENCES

1. Cole DK, et al. 2004. Cell Mol Immunol. 1(2):81-8
2. Kern Petra S., et al. 1998. Immunity. 9: 519-530
3. Veillette A. et al. 1988. Cell. 55:301-308

<sup>1</sup>cFluor® r840 is a tandem dye made with APC. Caution – Tandem dyes may show changes in their emission spectra with prolonged exposure to light or fixatives.

For Research Use Only. Not intended for use in diagnostic procedures.