Revision 6

#35467 Store at +4C

CD8α (2.43) Rat mAb (FITC Conjugate)

Cell Signaling TECHNOLOGY®

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Applications:	Reactivity:	Sensitivity:	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
IF-F, FC-FP, FC-L	M	Endogenous	Rat IgG2b	#P01731	12525

Product Usage Information

For optimal flow cytometry results, we recommend 0.5 µg of antibody per test.

Application	Dilution
Immunofluorescence (Frozen)	1:50 - 1:200
Flow Cytometry (Fixed/Permeabilized)	1:100
Flow Cytometry (Live)	1:100

Storage

Supplied in 10 mM NaH_2PO_4, 150 mM NaCl, 0.09% NaN_3, 0.1% gelatin, pH 7.2. This product is stable for 12 months when stored at 4ºC. Do not aliquot the antibody. Protect from light. Do not freeze.

Specificity / Sensitivity

CD8α (2.43) Rat mAb (FITC Conjugate) recognizes endogenous levels of total CD8α protein. This antibody detects an epitope within the extracellular domain.

Source / Purification

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation.

Product Description

This Cell Signaling Technology antibody is conjugated to FITC and tested in-house for direct flow cytometric analysis in mouse cells.

Background

Cluster of Differentiation 8 (CD8) is a disulphide-linked heterodimer consisting of the unrelated α and β subunits. Each subunit is a glycoprotein composed of a single extracellular Ig-like domain, a polypeptide linker, a transmembrane part and a short cytoplasmic tail. On T cells, CD8 is the coreceptor for the T cell receptor (TCR), and these two distinct structures recognize the Antigen–Major Histocompatibility Complex (MHC). Specifically, the Ig-like domain of CD8α interacts with the α3-domain of the MHC class I molecule. CD8 ensures specificity of the TCR–antigen interaction, prolongs the contact between the T cell and the antigen presenting cell, and the α chain recruits the tyrosine kinase Lck, which is essential for T cell activation (1).

Background References

1. Zamoyska, R. (1994) *Immunity* 1, 243-46.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Applications Key

IF-F: Immunofluorescence (Frozen) **FC-FP:** Flow Cytometry (Fixed/Permeabilized)
FC-L: Flow Cytometry (Live)

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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