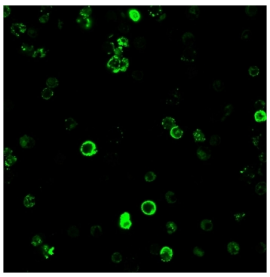
CD8A Antibody CF488 / CD8A Fluorescent Antibody [clone C8/468] (V2043CF488)

Catalog No.	Formulation	Size
V2043CF488-100T	500 ul at 0.1 mg/ml with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 Tests

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	CF488 Conjugate
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	C8/468
Purity	Protein G affinity chromatography
UniProt	P01732
Localization	Cell surface
Applications	Flow cytometry: 1-2ug/million cells Immunofluorescence: 1-3ug/ml
Limitations	This CD8A Antibody CF488 / CD8A Fluorescent Antibody is available for research use only.



CD8A Antibody Human PBMC IF. Immunofluorescence analysis of CD8 alpha (CD8A) in human PBMC using the unlabeled CD8A antibody with CF488-conjugated secondary antibody shows strong membrane-associated green fluorescence in cytotoxic T lymphocytes, consistent with cell surface localization and enabling clear identification of CD8-positive immune cell populations within heterogeneous samples (clone C8/468). A directly labeled CD8A CF488 antibody would provide similar membrane staining while eliminating the need for a secondary antibody, reducing assay time and minimizing non-specific background. This direct format is particularly advantageous for multiplex fluorescence experiments where avoiding secondary antibody cross-reactivity improves signal clarity and panel design.

Description

CD8 alpha (CD8A) is a transmembrane glycoprotein expressed on cytotoxic T lymphocytes where it functions as a co-

receptor for T cell receptor signaling through interaction with MHC class I molecules. CD8A antibody is widely used to identify and visualize cytotoxic T cells in fluorescence-based applications, and CD8A Antibody CF488 enables direct fluorescent detection without the need for secondary reagents. CD8A antibody, also referred to as CD8 alpha antibody or CD8 antigen antibody, is a key marker for detecting cytotoxic T lymphocytes in immune profiling and cell-based fluorescence assays.

CD8A is localized to the plasma membrane of cytotoxic T cells, where it forms heterodimers with CD8B or homodimers in certain immune subsets. Fluorescent detection of CD8A produces strong membrane-associated signal outlining individual lymphocytes, allowing clear visualization of cell morphology and distribution within heterogeneous samples. This makes CD8A fluorescent antibody detection particularly useful for identifying CD8-positive immune cells in mixed populations such as PBMCs and tissue-derived cell suspensions.

This mouse monoclonal antibody, clone C8/468, is available in a CF488-labeled format, providing bright green fluorescence for direct detection. The directly labeled CD8A antibody eliminates the need for secondary antibody incubation, significantly simplifying staining workflows and reducing total assay time. This direct format is especially advantageous in experiments requiring rapid processing, consistent staining conditions, or reduced protocol variability across samples.

The fluorophore-labeled CD8A antibody format also minimizes background signal associated with secondary antibody binding, improving signal specificity and overall signal-to-noise ratio. This is particularly important in complex biological samples where non-specific secondary interactions or endogenous immunoglobulins may otherwise contribute to background staining. The CF488 conjugation provides stable and reproducible fluorescence intensity, supporting reliable detection of CD8-positive cells.

CD8A CF488 antibody is especially well suited for multiplex fluorescence applications where reducing cross-reactivity between detection reagents is critical. By removing the need for secondary antibodies, the directly labeled format simplifies panel design and improves compatibility with additional fluorescent markers. This allows efficient integration into multi-parameter imaging and fluorescence-based assays without the risk of secondary antibody overlap.

Direct fluorescent detection of CD8A supports a wide range of applications, including confocal microscopy, fluorescence imaging of PBMC populations, and high-content analysis workflows. The ability to rapidly visualize membrane-localized CD8A signal with minimal background makes CD8A Antibody CF488 a powerful tool for efficient and reproducible detection of cytotoxic T cells in fluorescence-based experiments.

This antibody is part of a broader selection of immune cell marker antibodies designed to support studies of T cell biology, immune infiltration, and tumor immunology, including application-specific CD8A antibody reagents for IHC, FACS, WB, and IF.

Application Notes

Optimal dilution of the CD8A Antibody CF488 / CD8A Fluorescent Antibody should be determined by the researcher.

Immunogen

Human recombinant protein was used as the immunogen for this CD8a antibody.

Storage

Store the CD8a antibody at 2-8oC, protected from light.

Alternate Names

CD8A CF488 antibody, CD8A fluorescent antibody, CD8 alpha labeled antibody, CD8A direct fluorescent antibody, CD8 cytotoxic T cell fluorescent marker antibody

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