

Spark Red™ 718 anti-human CD8a Antibody

Catalog# / Size	388805 / 25 tests 388806 / 100 tests
Clone	S21010F
Regulatory Status	RUO
Other Names	T8, Leu2, CD8 Antigen
Isotype	Mouse IgG2b, κ
Description	CD8 α , also known as T8 or Leu2, is a 32-34 kD type 1 transmembrane glycoprotein part of the immunoglobulin superfamily. CD8 α is expressed on cytotoxic T cells, NK Cells, as well as a majority of thymocytes. CD8 α can form a homodimer (CD8 α/α) or heterodimer (CD8 α/β) with CD8 β . CD8 α acts as a co-receptor with MHC class I-restricted T cell receptors in antigen recognition and T cell activation, and has been shown to play a role in thymic differentiation. Two domains in CD8 α are important for function: the extracellular Ig superfamily domain binds the $\alpha 3$ domain of MHC Class I and the cytoplasmic CXCP motif binds the tyrosine kinase p56 Lck.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human CD8 α -transfected cells
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with Spark Red™ 718 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
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 5 μ L per million cells in 100 μ L staining volume or 5 μ L per 100 μ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. * Spark Red™ 718 has a maximum excitation of 697 nm and a maximum emission of 711 nm.
Excitation Laser	Red Laser (633 nm)
Application Notes	Clone S21010F can completely block the binding of clone HIT8a, clone RPA-T8, and clone SK1 on target cells and can be blocked by HIT8a and SK1. Clone S21010F does not interfere with the binding of anti-human CD8 β antibodies S21011A or QA20A40. Clone S21010F shows comparable staining signals on 4% paraformaldehyde-fixed cells and unfixed cells.
RRID	AB_3675117 (BioLegend Cat. No. 388805) AB_3675117 (BioLegend Cat. No. 388806)

Antigen Details

Structure	Ig superfamily
Distribution	Subset of T Cells, most thymocytes, NK cells
Function	TCR co-receptor
Interaction	CD8 β
Ligand/Receptor	MHC Class I molecules
Cell Type	NK cells, T cells, Thymocytes
Biology Area	Immunology
Molecular Family	CD Molecules

Antigen References

1. Barclay N, *et al.* 1993. The Leucocyte Antigen FactsBook. Academic Press Inc. San Diego.
2. Leahy, D.J, 1995. *FASEB J.* 9:17-25.

Gene ID [925](#)

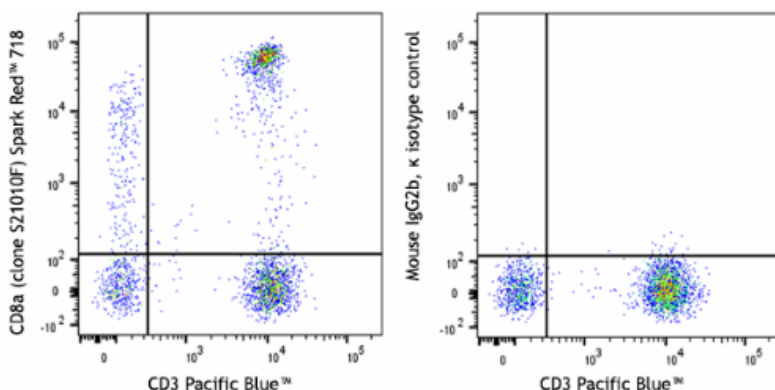
Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human CD8a, PE anti-human CD8a, Spark Red™ 718 anti-human CD8a, FITC anti-human CD8a Antibody, Alexa Fluor® 700 anti-human CD8a Antibody, PE/Dazzle™ 594 anti-human CD8a Antibody, PE/Cyanine7 anti-human CD8a Antibody, Spark Violet™ 538 anti-human CD8a Antibody

Product Data



Human peripheral blood lymphocytes were stained with anti-human CD3 (clone UCHT1) Pacific Blue™ and anti-human CD8a (clone S21010F) Spark Red™ 718 (left) or mouse IgG2b, κ Spark Red™ 718 isotype control (right).

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