

Spark Red™ 718 anti-human CD7 Antibody

Catalog# / Size	343137 / 25 tests 343138 / 100 tests
Clone	CD7-6B7
Regulatory Status	RUO
Workshop	IV T-164
Other Names	gp40
Isotype	Mouse IgG2a, κ
Description	CD7 is a 40 kD type I transmembrane glycoprotein also known as gp40. It is a member of the immunoglobulin superfamily found on T cells, NK cells, thymocytes, hematopoietic progenitors, and monocytes (weakly). CD7 is also expressed on acute lymphocytic leukemia (ALL) and some acute myeloid leukemia (AML) cells. CD7 crosslinking induces a calcium flux in T lymphocytes, presumably as a result of cytoplasmic domain association with PI3-kinase. CD7 costimulation can induce cytokine secretion and modulate cellular adhesion.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	KG1a cell line
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 µL per million cells in 100 µL staining volume or 5 µL per 100 µL 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	Additional reported (for the relevant formats) applications include proteogenomics ² .
Application References (PubMed link indicates BioLegend citation)	1. Knapp W, <i>et al.</i> 1989. <i>Leucocyte Typing IV: White Cell Differentiation Antigens</i> . Oxford University Press. 2. Peterson VM, <i>et al.</i> 2017. <i>Nat. Biotechnol.</i> 35:936. (PG)
RRID	AB_3720516 (BioLegend Cat. No. 343137) AB_3720516 (BioLegend Cat. No. 343138)

Antigen Details

Structure	Ig superfamily, type I transmembrane glycoprotein, 40 kD
Distribution	T cells, NK cells, thymocytes, hematopoietic progenitors, myeloid leukemic cell subsets
Function	T cell activation
Ligand/Receptor	Cytoplasmic domain associates with P13-kinase
Cell Type	Hematopoietic stem and progenitors, Leukemia, NK cells, T cells, Thymocytes
Biology Area	Costimulatory Molecules, Immunology
Molecular Family	CD Molecules
Antigen References	1. Barclay N, <i>et al.</i> 1993. <i>The Leucocyte Antigen FactsBook</i> . Academic Press Inc. San Diego. 2. Stillwell R, <i>et al.</i> 2001. <i>Immunol. Res.</i> 24:31. 3. Rabinowich H, <i>et al.</i> 1994. <i>J. Immunol.</i> 152:517.
Gene ID	924

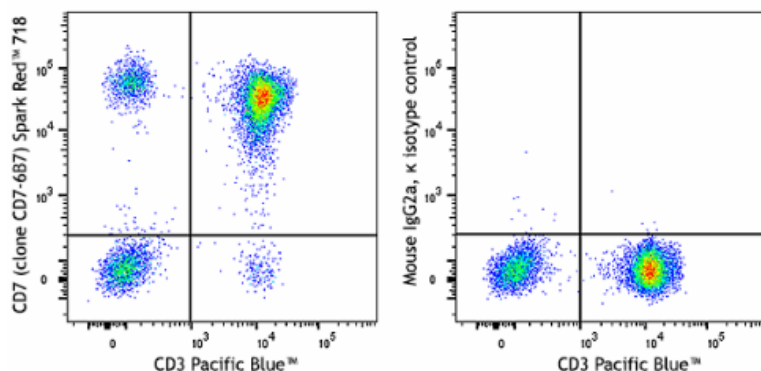
Related Protocols

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

Other Formats

TotalSeq™-D0066 anti-human CD7, GMP APC anti-human CD7, GMP FITC anti-human CD7, PE/Dazzle™ 594 anti-human CD7, GMP PE/Cyanine7 anti-human CD7, GMP Pacific Blue™ anti-human CD7, Spark NIR™ 685 anti-human CD7, Purified anti-human CD7 (Maxpar® Ready), APC anti-human CD7, FITC anti-human CD7, PerCP/Cyanine5.5 anti-human CD7, APC/Fire™ 750 anti-human CD7, Alexa Fluor® 647 anti-human CD7, PE/Cyanine5 anti-human CD7, Purified anti-human CD7, PE/Cyanine7 anti-human CD7, Pacific Blue™ anti-human CD7, GMP PE anti-human CD7, GMP PE/Dazzle™ 594 anti-human CD7, Spark Red™ 718 anti-human CD7 Antibody, Spark YG™ 593 anti-human CD7 (Flexi-Fluor™), TotalSeq™-A0066 anti-human CD7, TotalSeq™-C0066 anti-human CD7, Pacific Blue™ anti-human CD7 Antibody, Spark PLUS V475™ anti-human CD7 (Flexi-Fluor™), Alexa Fluor® 700 anti-human CD7, PE anti-human CD7, Spark PLUS B550™ anti-human CD7 (Flexi-Fluor™), Spark YG™ 581 anti-human CD7 (Flexi-Fluor™), TotalSeq™-B0066 anti-human CD7

Product Data



Human peripheral blood lymphocytes were stained with anti-human CD3 (clone UCHT1) Pacific Blue™ and anti-human CD7 (clone CD7-6B7) Spark Red™ 718 (left) or mouse IgG2a, κ Spark Red™ 718 isotype control (right).

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