

Spark Blue™ 550 anti-human CD244 (2B4) Antibody

Catalog# / Size	329545 / 25 tests 329546 / 100 tests
Clone	C1.7
Regulatory Status	RUO
Workshop	VII 70350
Other Names	2B4, SLAMF4
Isotype	Mouse IgG1, κ
Description	CD244, known as 2B4, is a 38 kD type I transmembrane protein. It is a member of the CD2 subset of the immunoglobulin superfamily (IgSF) molecules. CD244 is expressed on NK cells, a subset of T cells (including most CD8 ⁺ T cells and γ/δ T cells), monocytes, basophils, and eosinophils. CD48 is the ligand of CD244. It has been reported that ligation of human CD244 results in enhanced NK cell cytotoxicity and cytokine production. Recent studies have shown that human CD244, like murine CD244, has both activating and inhibitory functions, which are dependent on the density of surface 2B4 expression, degree of ligation, and the level of the adaptor molecule SAP expression.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
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 Blue™ 550 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 Blue™ 550 has a maximum excitation of 516 nm and a maximum emission of 540 nm.
Excitation Laser	Blue Laser (488 nm)
Application Notes	Additional reported applications (for the relevant formats) include: inducing cytokine production by NK cells, enhancing NK cytotoxicity, and Western blotting.
Application References	1. Valiante NM and Trinchieri G. 1993. <i>J. Exp. Med.</i> 178:1397. 2. Chuang SS, <i>et al.</i> 2000. <i>Immunology.</i> 100:378. 3. Hoffmann SC, <i>et al.</i> 2011. <i>J. Immunol.</i> 186:2757. PubMed 4. Rossi LE, <i>et al.</i> 2012. <i>J Leukoc Biol.</i> 91:321. PubMed 5. Correia DV, <i>et al.</i> 2011. <i>Blood</i> 118:992. (FC) PubMed
(PubMed link indicates BioLegend citation)	

Antigen Details

Structure	38 kD type I transmembrane protein, CD2 family member, Ig superfamily
Distribution	NK, T subset, monocytes, basophils, and eosinophils
Function	Activation and inhibition of NK cell function
Ligand/Receptor	CD48
Cell Type	Basophils, Eosinophils, Monocytes, NK cells, T cells
Biology Area	Immunology
Molecular Family	CD Molecules
Antigen References	1. Lee KM, <i>et al.</i> 2003. <i>J. Immunol.</i> 170:4881. 2. Chlewicki LK, <i>et al.</i> 2008. <i>J. Immunol.</i> 180:8159. 3. Messmer B, <i>et al.</i> 2006. <i>J. Immunol.</i> 176:4646. 4. Boles KS, <i>et al.</i> 2001. <i>Immunol. Rev.</i> 181:234.
Gene ID	51744

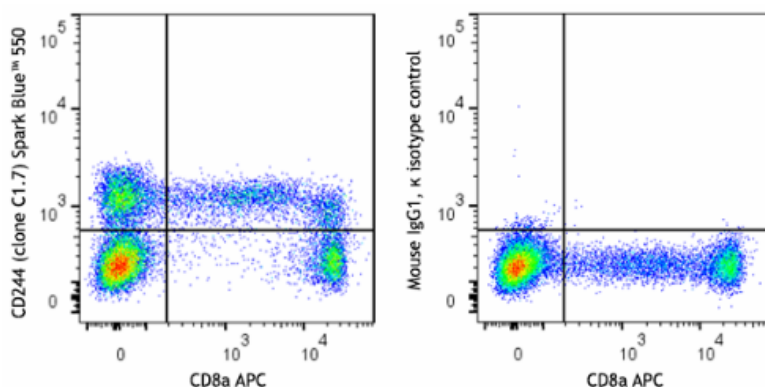
Related Protocols

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

Other Formats

TotalSeq™-D0189 anti-human CD244 (2B4), APC/Cyanine7 anti-human CD244 (2B4), PE/Cyanine7 anti-human CD244 (2B4), Pacific Blue™ anti-human CD244 (2B4), PE/Dazzle™ 594 anti-human CD244 (2B4), Alexa Fluor® 700 anti-human CD244 (2B4), Purified anti-human CD244 (2B4), FITC anti-human CD244 (2B4), APC anti-human CD244 (2B4), PE anti-human CD244 (2B4), Alexa Fluor® 647 anti-human CD244 (2B4), Biotin anti-human CD244 (2B4), PerCP/Cyanine5.5 anti-human CD244 (2B4), PE/Fire™ 700 anti-human CD244 (2B4), TotalSeq™-A0189 anti-human CD244 (2B4), Brilliant Violet 510™ anti-human CD244 (2B4), Brilliant Violet 605™ anti-human CD244 (2B4), Spark Blue™ 550 anti-human CD244 (2B4), TotalSeq™-B0189 anti-human CD244 (2B4), PE/Cyanine5 anti-human CD244 (2B4), TotalSeq™-C0189 anti-human CD244 (2B4), Brilliant Violet 421™ anti-human CD244 (2B4)

Product Data



Human peripheral blood lymphocytes were stained with anti-human CD8a (clone RPA-T8) APC and anti-human CD244 (2B4) (clone C1.7) Spark Blue™ 550 (left) or mouse IgG1, κ Spark Blue™ 550 isotype control (right).

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