

Spark NIR™ 685 anti-human HLA-A,B,C Antibody

Catalog# / Size	311453 / 25 tests 311454 / 100 tests
Clone	W6/32
Regulatory Status	RUO
Other Names	Major Histocompatibility Class I, MHC class I
Isotype	Mouse IgG2a, κ
Description	MHC class I antigens associated with β2-microglobulin are expressed by all human nucleated cells. MHC class I molecules are involved in presentation of antigens to CD8 ⁺ T cells. They play an important role in cell-mediated immune responses and tumor surveillance.

Product Details

Verified Reactivity	Human, Cynomolgus, Rhesus
Reported Reactivity	African Green, Baboon, Cat, Cow, Chimpanzee
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 NIR™ 685 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
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 NIR™ 685 has a maximum excitation of 665 nm and a maximum emission of 685 nm.
Excitation Laser	Red Laser (633 nm)
Application Notes	Clone W6/32 recognizes residues in the N terminus of the human β2-microglobulin molecule ²¹ . Additional reported applications (for the relevant formats) include: immunoprecipitation ² , Western blotting (non-reducing) ³ , immunohistochemical staining of acetone-fixed frozen tissue sections ^{4,5} , blocking ^{6,7} , inhibition of NK cell-mediated lysis ¹⁰ , and activation ^{8,9} . Clone W6/32 has been reported not to be suitable for immunohistochemistry on paraffin sections ¹⁷ . The LEAF™ purified antibody (Endotoxin < 0.1 EU/μg, Azide-Free, 0.2 μm filtered) is recommended for functional assays. For highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 311428) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin < 0.01 EU/μg).
Application References	<ol style="list-style-type: none"> 1. Darrow TL, <i>et al.</i> 1989. <i>J. Immunol.</i> 142:3329. 2. Stern P, <i>et al.</i> 1987. <i>J. Immunol.</i> 138:1088. 3. Tran TM, <i>et al.</i> 2001. <i>Immunogenetics</i> 53:440. 4. Barbatis C, <i>et al.</i> 1981. <i>Gut</i> 22:985. 5. Ayyoub M, <i>et al.</i> 2004. <i>Cancer Immunity</i> 4:7. 6. DeFelice M, <i>et al.</i> 1990. <i>Cell. Immunol.</i> 126:420. 7. Fayen J, <i>et al.</i> 1998. <i>Int. Immunol.</i> 10:1347. 8. Turco MC, <i>et al.</i> 1988. <i>J. Immunol.</i> 141:2275.
(PubMed link indicates BioLegend citation)	

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11. Nagano M, *et al.* 2007. *Blood* 110:151.
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14. Lunemann A, *et al.* 2008. *J. Immunol.* 181:6170. [PubMed](#)
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16. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
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18. Coppieters KT, *et al.* 2012. *J. Exp. Med.* 209:51. (epitope)
19. Crivello P, *et al.* 2013. *Hum Immunol.* 22:100. [PubMed](#)
20. Jung Y, *et al.* 2015. *Mol Cancer Res.* 13:197. [PubMed](#)
21. Shields MJ, Ribaudo RK. 1998. *Tissue Antigens.* 51(5):567-70. (epitope)

Product Citations

1. Mulder K, *et al.* 2021. *Immunity.* 54(8):1883-1900.e5. [PubMed](#)

RRID

AB_2876612 (BioLegend Cat. No. 311453)
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Antigen Details

Structure	Ig superfamily
Distribution	All nucleated cells
Function	Antigen presentation
Ligand/Receptor	CD3/TCR, CD8
Biology Area	Immunology, Innate Immunity
Molecular Family	MHC Antigens
Antigen References	1. Barclay AN, <i>et al.</i> Eds. 1993. <i>The Leukocyte Antigen FactsBook.</i> Academic Press Inc. San Diego.
Gene ID	3105

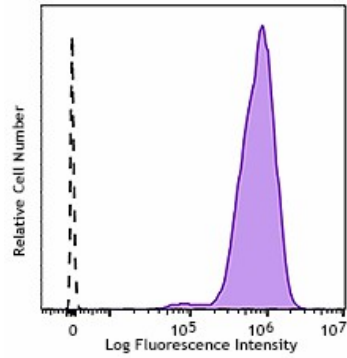
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

APC anti-human HLA-A,B,C, FITC anti-human HLA-A,B,C, PE anti-human HLA-A,B,C, PE/Cyanine5 anti-human HLA-A,B,C, Purified anti-human HLA-A,B,C, Alexa Fluor® 488 anti-human HLA-A,B,C, Alexa Fluor® 647 anti-human HLA-A,B,C, Pacific Blue™ anti-human HLA-A,B,C, PerCP anti-human HLA-A,B,C, APC/Cyanine7 anti-human HLA-A,B,C, PerCP/Cyanine5.5 anti-human HLA-A,B,C, Ultra-LEAF™ Purified anti-human HLA-A,B,C, PE/Cyanine7 anti-human HLA-A,B,C, Brilliant Violet 510™ anti-human HLA-A,B,C, Alexa Fluor® 700 anti-human HLA-A,B,C, PE/Dazzle™ 594 anti-human HLA-A,B,C, Biotin anti-human HLA-A,B,C, Brilliant Violet 605™ anti-human HLA-A,B,C, APC/Fire™ 750 anti-human HLA-A,B,C, TotalSeq™-A0058 anti-human HLA-A,B,C, TotalSeq™-C0058 anti-human HLA-A,B,C, TotalSeq™-B0058 anti-human HLA-A,B,C, Spark NIR™ 685 anti-human HLA-A,B,C, TotalSeq™-D0058 anti-human HLA-A,B,C

Product Data



Human peripheral blood lymphocytes were stained with HLA-A,B,C (clone W6/32) Spark NIR™ 685 (filled histogram) or mouse IgG2a, κ Spark NIR™ 685 isotype control (open histogram).

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