SONY

Product Data Sheet

Spark NIR™ 685 anti-human HLA-A,B,C

Catalog # / Size: 2157265 / 25 tests
2157270 / 100 tests

Clone: W6/32

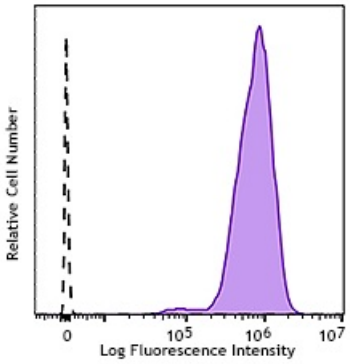
Isotype: Mouse IgG2a, κ

Reactivity: Human, Non-human primate, Other

Preparation: The antibody was purified by affinity chromatography and conjugated with Spark NIR™ 685 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA)

Concentration: Lot-specific



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).

Applications:

Applications: Flow Cytometry

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.

Application Notes: Clone W6/32 recognizes residues in the N terminus of the human ß2-microglobulin molecule[21].

Additional reported applications (for the relevant formats) include: immunoprecipitaton[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:

1. Darrow TL, *et al.* 1989. *J. Immunol.* 142:3329.
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3. Tran TM, *et al.* 2001. *Immunogenetics* 53:440.
4. Barbatis C, *et al.* 1981. *Gut* 22:985.
5. Ayyoub M, *et al.* 2004. *Cancer Immunity* 4:7.
6. DeFelice M, *et al.* 1990. *Cell. Immunol.* 126:420.
7. Fayen J, *et al.* 1998. *Int. Immunol.* 10:1347.
8. Turco MC, *et al.* 1988. *J. Immunol.* 141:2275.
9. Geppert TD, *et al.* 1989. *J. Immunol.* 142:3763.
10. Wooden SL, *et al.* 2005. *J. Immunol.* 175:1383.
11. Nagano M, *et al.* 2007. *Blood* 110:151.
12. McLoughlin RM,*et al.*2008. *J. Immunol.* 181:1323. PubMed
13. Takahara M, *et al.*2008. *J. Leukoc. Biol.* 83:742. PubMed
14. Lunemann A, *et al.*2008. *J. Immunol.* 181:6170. PubMed
15. Laing BJ, *et al.* 2010. *J. Thorac Cardiovasc Surg.* 139:1402. PubMed
16. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
17. Vambutas A, *et al.* 2000. *Clin. Diagn. Lab. Immun.* 7:79.
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)

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.

Antigen References: 1. Barclay AN, *et al.* Eds. 1993. The Leukocyte Antigen FactsBook. Academic Press Inc. San Diego.