

# GMP Ultra-LEAF™ Purified anti-human HLA-A,B,C SF Antibody

Catalog# / Size	311459 / 100 µg 311460 / 1 mg
Clone	W6/32
Other Names	Major Histocompatibility Class I, MHC class I
lsotype	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. GMP Ultra-LEAF™ Purified anti-human HLA-A,B,C SF Antibody was GMP manufactured under serum-free conditions including serumfree hybridoma cell culture, without additional animal or human-derived materials or preservatives. This antibody contains ultra-low levels of endotoxin (<0.01EU/µg of protein), is filtered through a 0.1 µm membrane, and is tested negative for mycoplasma and microbial growths. GMP Ultra-LEAF™ Purified anti-human HLA-A,B,C SF Antibody is for research and further ex vivo bioprocessing use only

## **Product Details**

Reactivity	Human
Reported Reactivity	African Green, Baboon, Cat, Cow, Chimpanzee, Cynomolgus, Rhesus
Antibody Type	Monoclonal
Host Species	Mouse
Formulation	0.1 $\mu$ m filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is < 0.01 EU/ $\mu$ g of the protein (< 0.001 ng/ $\mu$ g of the protein) as determined by the LAL test
Preparation	The Ultra-LEAF ™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.
Concentration	1.0 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C. This Ultra-LEAF™ solution contains no preservative; handle under aseptic conditions.
Application	<u>FC - Quality tested</u> Activ, Block, IHC-F, IP, WB - Reported in the literature, not verified in house
Recommended Usage	Each lot of this antibody is quality control tested by <u>immunofluorescent staining with flow cytometric</u> <u>analysis</u> . For flow cytometric staining, the suggested use of this reagent is $\leq 2.0 \mu$ g per million cells in 100 $\mu$ L volume. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	Clone W6/32 recognizes residues in the N terminus of the human $\&$ 2-microglobulin molecule <sup>21</sup> .
	Additional reported applications (for the relevant formats) include: immunoprecipitaton <sup>2</sup> , Western blotting (non-reducing) <sup>3</sup> , immunohistochemical staining of acetone-fixed frozen tissue sections <sup>4,5</sup> , blocking <sup>6,7</sup> , inhibition of NK cell-mediated lysis <sup>10</sup> , and activation <sup>8,9</sup> . Clone W6/32 has been reported not to be suitable for immunohistochemistry on paraffin sections <sup>17</sup> .
Additional Product Notes	This GMP Ultra-LEAF <sup><math>M</math></sup> Purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.1 µm filtered) is recommended for highly sensitive assays. The antibody was GMP manufactured under serum-free conditions including serum-free hybridoma cell culture, without additional animal or human-derived materials or preservatives. This antibody is intended for flow cytometry and for research or further <i>ex vivo</i> bioprocessing use only.
Application References	1. Darrow TL, et al. 1989. J. Immunol. 142:3329.
(PubMed link indicates BioLegend citation)	<ol> <li>Stern P, et al. 1987. J. Immunol. 138:1088.</li> <li>Tran TM, et al. 2001. Immunogenetics 53:440.</li> <li>Barbatis C, et al. 1981. Gut 22:985.</li> <li>Ayyoub M, et al. 2004. Cancer Immunity 4:7.</li> </ol>

- 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 Á, 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)

#### Disclaimer

**GMP Ultra-LEAF**<sup>™</sup> **antibodies**. BioLegend GMP Ultra-LEAF<sup>™</sup> antibodies are manufactured in a dedicated GMP facility and compliant with ISO 13485:2016. For research or *ex vivo* cell processing use. Not for use in diagnostic or therapeutic procedures. Our processes include:

- Batch-to-batch consistency
- Material traceability
- Documented procedures
- Documented employee training
- Equipment maintenance and monitoring records
- Lot-specific certificates of analysis
- Quality audits per ISO 13485:2016
- QA review of released products

BioLegend GMP Ultra-LEAF<sup>™</sup> antibodies are manufactured and tested in accordance with USP Chapter 1043, Ancillary Materials for Cell, Gene and Tissue-Engineered Products and Ph. Eur. Chapter 5.2.12

#### **Antigen Details**

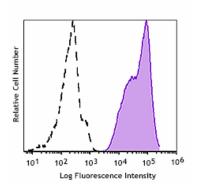
Structure	lg superfamily
Distribution	All nucleated cells
Function	Antigen presentation
Ligand/Receptor	CD3/TCR, CD8
Biology Area	Immunology, Innate Immunity
Molecular Family	MHC Antigens
Antigen References	1. Barclay AN, <i>et al.</i> Eds. 1993. The Leukocyte Antigen FactsBook. Academic Press Inc. San 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/Cyanine7 anti-human HLA-A,B,C, Biotin 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, PC/Fire™ 750 anti-human HLA-A,B,C, TotalSeq™-A0058 anti-human HLA-A,B,C, TotalSeq™-C0058 anti-human HLA-A,B,C



Human peripheral leukocytes were stained with GMP Ultra-LEAF™ Purified anti-human HLA-A,B,C SF antibody (Clone W6/32, filled histogram) or isotype control (Clone MOPC-173, open histogram) followed by anti-mouse IgG FITC stain.

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