Alexa Fluor® 647 anti-mouse I-A^b Antibody

Catalog# / Size	116412 / 100 µg
Clone	AF6-120.1
Regulatory Status	RUO
Other Names	MHC class II
Isotype	Mouse (BALB/c) IgG2a, κ
Description	The AF6-120.1 antibody reacts with the I-A^b MHC class II alloantigen. These class II molecules are expressed on antigen presenting cells (including B cells) and a subset of T cells from H-2^b bearing mice, and are involved in antigen presentation to T cells expressing CD3/TCR and CD4 proteins. The AF6-120.1 antibody cross-reacts with H-2^k and H-2^u haplotypes; this antibody does not cross-react with other haplotypes (d, f, q, r, s).

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	C57BL/10J splenocytes
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 under optimal conditions.
Concentration	0.5 mg/ml
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 ≤ 0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application. * Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm. Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation. View full statement regarding label licenses
Excitation Laser	Red Laser (633 nm)
Application Notes	Additional reported applications (for relevant formats of this clone) include: immunohistochemical staining of frozen sections (acetone-fixed[5]; OCT-embedded, ethanol-fixed sections[7]), immunofluorescence microscopy[3] (including acetone-fixed epidermal sheets[6]), immunoprecipitation[7,8]. Directly conjugated antibody was used for IF in (3) and (6) and for IHC in (5). Does not react with other haplotypes (*e.g.,* d, f, q, r, s).
Application References **(PubMed link indicates BioLegend citation)**	1. Wall KA, *et al.* 1983. *J. Immunol.* 131:1056. (FC) 2. Cohn LE, *et al.* 1986. *P. Natl. Acad. Sci. USA* 83:747. (FC) 3. Inaba K, *et al.* 1998. *J. Exp. Med.* 188:2163 (IF) 4. Hamrah P, *et al.* 2002. *Invest Opthalmol Vis. Sci.* 43:639 (IF) 5. Buono C, *et al.* 2003. *Arterioscler. Thromb. Vasc. Biol.* 23:454. (IHC) 6. Wang Z, *et al.* 2004. *J. Immunol.* 172:5924. (IHC IF)

7. Nakagawa TY, *et al.* 1999. *Immunity* 10:207. (IP)
8. Podolin PL, *et al.* 2008. *J. Immunol.* 180:7989. (FC IP) PubMed
9. Schneppenheim J, *et al.* 2013. *J Exp Med.* 210:41. PubMed.

Product Citations

1. Chang Y, *et al.* 2008. Blood. 111:5054. PubMed
2. Nagatake T, *et al.* 2022. Mucosal Immunol. 15:289. PubMed
3. Nagatake T, *et al.* 2018. J Allergy Clin Immunol. 142:470. PubMed
4. Niven J, *et al.* 2019. Cell Rep. 28:21. PubMed
5. Lopes N, *et al.* 2022. Elife. 11:. PubMed

RRID AB_493141 (BioLegend Cat. No. 116412)

Antigen Details

Structure	MHC class II
Distribution	B cell and activated T cells, APCs of H-2^b mice
Function	Antigen presentation
Ligand/Receptor	CD3/TCR, CD4
Cell Type	Antigen-presenting cells, B cells, T cells
Biology Area	Immunology, Innate Immunity
Molecular Family	MHC Antigens
Antigen References	1. Watts C. 1997. *Annu. Rev. Immunol.* 15:821. 2. Pamer E, *et al.* 1998. *Annu. Rev. Immunol.* 16:323.
Gene ID	14961

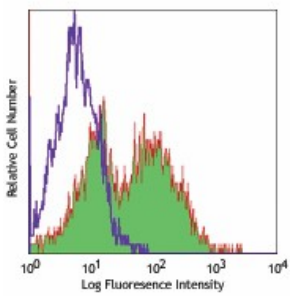
Related Protocols

Cell Surface Flow Cytometry Staining Protocol

Other Formats

Biotin anti-mouse I-A^b, FITC anti-mouse I-A^b, PE anti-mouse I-A^b, Purified anti-mouse I-A^b, Alexa Fluor® 488 anti-mouse I-A^b, Alexa Fluor® 647 anti-mouse I-A^b, PerCP/Cyanine5.5 anti-mouse I-A^b, APC anti-mouse I-A^b, PE/Cyanine7 anti-mouse I-A^b, Pacific Blue™ anti-mouse I-A^b, APC/Fire™ 750 anti-mouse I-A^b, APC/Cyanine7 anti-mouse I-A^b

Product Data



C57BL/6 mouse splenocytes stained with AF6-120.1 Alexa Fluor® 647

BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587