

Pacific Blue™ anti-mouse I-A^b Antibody

Catalog# / Size	116421 / 25 µg 116422 / 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 ^d 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 Pacific Blue™ 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	<p>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 ≤1.0 µg per million cells in 100 µl volume or 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.</p> <p>Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p>View full statement regarding label licenses</p>
Excitation Laser	Violet Laser (405 nm)
Application Notes	<p>Additional reported applications (for relevant formats of this clone) include: immunohistochemical staining of frozen sections (acetone-fixed⁵; OCT-embedded, ethanol-fixed sections⁷), immunofluorescence microscopy³ (including acetone-fixed epidermal sheets⁶), immunoprecipitation^{7,8}. Directly conjugated antibody was used for IF in (3) and (6) and for IHC in (5).</p> <p>Does not react with other haplotypes (e.g., d, f, q, r, s).</p>
Application References	<ol style="list-style-type: none">1. Wall KA, <i>et al.</i> 1983. <i>J. Immunol.</i> 131:1056. (FC)2. Cohn LE, <i>et al.</i> 1986. <i>P. Natl. Acad. Sci. USA</i> 83:747. (FC)3. Inaba K, <i>et al.</i> 1998. <i>J. Exp. Med.</i> 188:2163 (IF)
(PubMed link indicates BioLegend citation)	

4. Hamrah P, *et al.* 2002. *Invest Ophthalmol 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. Kim JS, *et al.* 2020. *Immunity.* 54(1):176-190.e7. [PubMed](#)
2. Kokona D, *et al.* 2016. *Exp Eye Res.* S0014-4835(16)30499-7. [PubMed](#)
3. Shemer A, *et al.* 2020. *Immunity.* 53(5):1033-1049.e7. [PubMed](#)
4. Jia X, *et al.* 2021. *Clin Transl Immunology.* 10:e1336. [PubMed](#)
5. Levine LS, *et al.* 2021. *Immunity.* 54(4):829-844.e5. [PubMed](#)
6. Tay S, *et al.* 2014. *J Immunol.* 193:2087. [PubMed](#)
7. Hanasoge Somasundara AV, *et al.* 2021. *Cell Rep.* 37:110099. [PubMed](#)
8. Pardy RD, *et al.* 2021. *Nat Commun.* 12:4051. [PubMed](#)
9. Bourque J, *et al.* 2021. *Heliyon.* 7:e08311. [PubMed](#)
10. Ruscher R, *et al.* 2018. *Bio Protoc.* 8:e2757. [PubMed](#)
11. Clemente-Casares X, *et al.* 2017. *Immunity.* 47:974. [PubMed](#)
12. Stotesbury C, *et al.* 2020. *Aging Cell.* 19:e13170. [PubMed](#)

RRID

AB_10613291 (BioLegend Cat. No. 116421)
 AB_10613473 (BioLegend Cat. No. 116422)

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. <i>Annu. Rev. Immunol.</i> 15:821. 2. Pamer E, <i>et al.</i> 1998. <i>Annu. Rev. Immunol.</i> 16:323.
Gene ID	14961

Related Protocols

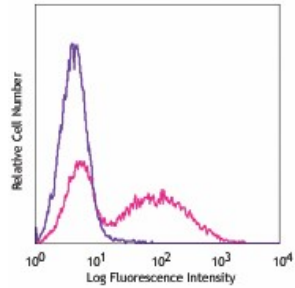
[Cell Surface Flow Cytometry Staining Protocol](#)

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 splenocytes stained with AF6-120.1 Pacific Blue™



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