Biotin anti-mouse I-A^d Antibody

Catalog# / Size	115003 / 50 µg
Clone	39-10-8
Regulatory Status	RUO
Other Names	MHC class II
Isotype	Mouse (C3H.SW) IgG3, κ
Description	The 39-10-8 antibody reacts with the I-A^d 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^d bearing mice and are involved in antigen presentation to T cells expressing CD3/TCR and CD4 proteins. The 39-10-8 antibody does not cross-react with other haplotypes (a, b, k, p, q, s), but has been demonstrated to cross-react with the g7 haplotype.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	(C3H x BALB/c)F$_1$ mouse cells
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C. **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 10^6 cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	Additional reported applications (for the relevant formats) include: immunofluorescence microscopy[2], and immunohistochemical staining of acetone-fixed frozen sections. Does not cross-react with other haplotypes (*e.g.,* a, b, k, p, q, s).
Application References **(PubMed link indicates BioLegend citation)**	1. Hiramine C, *et al.* 1995. *Cell. Immunol.* 160:157. 2. Wang Z, *et al.* 2004. *J. Immunol.* 172:5924. 3. Ma XT, *et al.* 2006. *Cancer Research* 66:1169. 4. Norian LA and Allen PM. 2004. *J. Immunol.* 173:835. PubMed 5. Tian C, *et al.* 2007. *J. Immunol.* 179:6762.
Product Citations	1. Bergot AS, *et al.* 2020. J Immunol. 204:1787. PubMed 2. Allen L 2004. J Immunol. 173:835. PubMed
RRID	AB_313618 (BioLegend Cat. No. 115003)

Antigen Details

Structure	MHC class II
Distribution	B cell and activated T cells, APCs of H-2^d mice
Function	Antigen presentation
Ligand/Receptor	CD3/TCR, CD4
Cell Type	Antigen-presenting cells, B cells, T cells, Tregs
Biology Area	Immunology, Innate Immunity
Molecular Family	MHC Antigens
Antigen References	1. Watts C. 1997. *Ann. Rev. Immunol.* 15:821. 2. Pamer E, *et al.* 1998. *Ann. Rev. Immunol.* 16:323. 3. Wall KA, *et al.* 1983. *J. Immunol.* 131:1056. 4. Ridgway WM, *et al.* 1998. *J. Exp. Med.* 188:2267.
Gene ID	14961

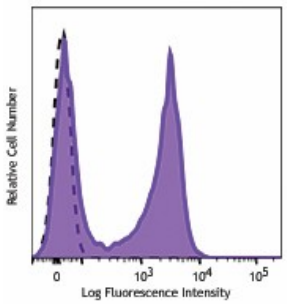
Related Protocols

Cell Surface Flow Cytometry Staining Protocol

Other Formats

Purified anti-mouse I-A^d, Biotin anti-mouse I-A^d, FITC anti-mouse I-A^d, Alexa Fluor® 488 anti-mouse I-A^d, Alexa Fluor® 647 anti-mouse I-A^d

Product Data



BALB/c mouse splenocytes were stained with biotinylated anti-mouse I-Ad (clone 39-10-8, filled histogram) or biotinylated mouse IgG3, κ isotype control (open histogram), followed by streptavidin PE.

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