OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for AM08081BT-S

MHC Class I H2 Kd/Dd Mouse Monoclonal Antibody [Clone ID: 34-1-2S]

Product data:

Product Type:	Primary Antibodies
Clone Name:	34-1-2S
Applications:	FC
Recommended Dilution:	**Flow Cytometry** (See Protocols for more details). **Results:** Tissue Distribution by Flow Cytometry Analysis: Mouse Strain: BALB/c Cell Concentration : 1x10e6 cells per test Antibody Concentration Used: 0.5 µg/10e6 cells. Isotypic Control: Biotin Mouse IgG2a Cell Source: Percentage of cells stained above control Thymus: 82.5% Spleen: 95.7% Lymph Node: 100%
Reactivity:	Mouse
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	BDF splenocytes. Donor: C3H spleen. Fusion Partner: Sp2/0-Ag14.
Specificity:	This Monoclonal Antibody reacts with both H-2Kd and H-2Dd products. The antibody also cross reacts with Kbsrpq. This K-D cross reaction indicates the presence of shared specificities between the two separate H-2 regions.
Formulation:	PBS containing 0.02% Sodium Azide as preservative and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml Label: Biotin State: Liquid purified Ig fraction
Concentration:	lot specific

View online »

Purification: Protein G Chromatography

Conjugation: Biotin

Storage: Store the antibody undiluted at 2-8°C for one month or in (aliquots) at -20°C for longer.
This product is photosensitive and should be protected from light.
Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Background: The 'classical' MHC Class I molecules are histocompatibility antigens encoded by the H-2 gene complex and consist of heterodimers of highly polymorphic alpha chains noncovalently associated with the invariant beta 2-Microglobulin. (Ref.3,4) These antigens are expressed on most nucleated cells but expression varies on different cell types. MHC Class I molecules present endogenously synthesized peptides to CD8+ T lymphocytes, which are usually cytotoxic T cells. (Ref.5) MHC Class I antigens expressed on thymic epithelial cells regulate the positive and negative selection of CD8+ T cells during T cell ontogeny. (Ref.3,6)

Note: Strain Distribution by Flow Cytometry Analysis:
Antibody Concentration: 0.2 µg/106 cells.
Strains Tested (Figure 2): See Ref.9 for a more detailed strain distribution.

Protocol: **FLOW CYTOMETRY ANALYSIS:**

Method:

1. Prepare a cell suspension in media A. For cell preparations, deplete the red blood cell population with Lympholyte®-M; cell separation medium.
2. Wash 2 times.
3. Resuspend the cells to a concentration of 2x107 cells/ml in media A. Add 50 µl of this suspension to each tube (each tube will then contain 1 x 106 cells, representing 1 test).
4. To each tube, add 0.5–0.2 µg* of AM08081BT-S per 10e6 cells.
5. Vortex the tubes to ensure thorough mixing of antibody and cells.
6. Incubate the tubes for 30 minutes at 4°C.
7. Wash 2 times at 4°C.
8. Add 100 µl of secondary antibody (Streptavidin-FITC) at a 1:500 dilution.
9. Incubate tubes at 4°C for 30-60 minutes (It is recommended that tubes are protected from light since most fluorochromes are light sensitive).
10. Wash 2 times at 4°C.
11. Resuspend the cell pellet in 50 µl ice cold media B.
12. Transfer to suitable tubes for flow cytometric analysis containing 15 µl of propidium iodide at 0.5 mg/ml in PBS. This stains dead cells by intercalating in DNA.

Media:

A. Phosphate buffered saline (pH 7.2) + 5% normal serum of host species + sodium azide (100 µl of 2M sodium azide in 100 mls).
B. Phosphate buffered saline (pH 7.2) + 0.5% Bovine serum albumin + sodium azide (100 µl of 2M sodium azide in 100 mls).

Product images:

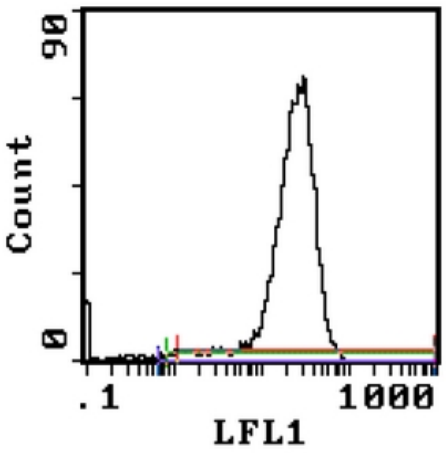

Figure 1. Cell Source: Spleen. Percentage of cells stained above control: 95.7%

Strain	H-2 Loci Alleles								+/-
	K	A_β	A_α	E_β	E_α	C4	C4S	D	
C3H/He	k	k	k	k	k	k	k	k	-
C57BL/6	b	b	b	b	b	b	b	b	(+/-)
BALB/c	d	d	d	d	d	d	d	d	+
DBA/1	q	q	q	q	q	q	q	q	+
SJL	s	s	s	s	s	s	s	s	+
B10.M	f	f	f	f	f	f	f	f	(+/-)
A.TH	s	s	s	s	s	s	s	d	+
A.TL	s	k	k	k	k	k	k	d	+
B10.A(3R)	b	b	b	b/k	k	d	d	d	+
P/J	p	p	p	p	p	p	p	p	(+/-)

Figure 2.