

BM4092**Monoclonal Antibody to MHC Class I H-2 Dd, H-2(k,q,s) - Purified**

Quantity:	0.1 mg
Concentration:	0.2 mg/ml (after reconstitution)
Host / Isotype:	Rat / IgG2a
Recommended Isotype Controls:	SM15P, SM15PX
Clone:	ER-MP42
Immunogen:	Mouse macrophage precursor cells
Format:	State: Lyophilized affinity purified IgG fraction Buffer System: PBS, pH 7.2, 10 mg/ml BSA as a stabilizer and 0.01% thimerosal as a preservative Reconstitution: Restore with 0.5 ml distilled water.
Applications:	Immunohistology on frozen sections (1:200; Acetone, Formaldehyde, Glutaraldehyde are suitable fixatives). Does not react on routinely processed paraffin sections. FACS (1:50 - 1:100). Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	Monoclonal antibody ER-MP42 detects murine MHC class I molecules on the surface of cells of the following haplotypes: H-2F _v , H-2D _d , H-2k, α , s. A weaker reactivity is found in mouse strains with the following haplotypes: H-2p, r, w7, w22. MHC class I molecules of other haplotypes are not recognized by ER-MP42. Species: Mouse. Does <u>not</u> react with human cells. Other species not tested.
Add. Information:	MHC class I antigens are heterodimers consisting of one α chain (44kDa) with β 2-microglobulin (11.5 kDa). The epitope recognized by ER-MP42 is resistant to 0.05% glutaraldehyde, 1% paraformaldehyde and acetone.
General Readings:	Klein, J.: Natural history of the histocompatibility complex. Wiley, New York (1986) Leenen, P.M.J., et al. Differential inhibition of macrophage proliferation by anti-transferrin receptor antibody ER-MP21: correlation to macrophage differentiation stage. Exp Cell Res 189: 55-63 (1990).

Pictures:

Antigen distribution: The antigen is expressed by all somatic cells at varying levels. Lymphocytes are highly positive whereas fibroblasts or neurons show only a low level of antigen.

ER-MP42 and ER-HR52 anti H-2 monoclonal antibody reactivity

Mouse Strain	Haplotype	Alleles at H-2 loci				ER-MP42 binding	ER-HR52 binding
		K	I-L	I-E	D		
Balb/c	d	d	d	d	d	++	++
DBA/2	d	d	d	d	d	++	++
C3H/Law	k	k	k	k	k	++	-
CBA	b	b	b	b	b	-	++
C57Bl/6	b	b	b	b	b	-	++
B10	b	b	b	b	b	-	++
B10.D2	d	d	d	d	d	++	+++
B10.M	f	f	f	f	f	-	±
B10.BR	k	k	k	k	k	++	-
B10.Y	p	p	p	p	p	±	++
B10.Q	q	q	q	q	q	++	++
B10.RIII	r	r	r	r	r	±	±
B10.S	s	s	s	s	s	++	±
B10.SM	v	v	v	v	v	++	-
B10.A	a	k	k	k	d	++	+
B10.OH	o2	d	d	d	k	++	+
B10.A(4R)	h4	k	k	b	b	+	++
B10.AKM	m	k	k	k	q	++	++
B10.MBR	bg1	b	k	k	q	+	+
B10.A(5R)	i5	b	b	k	d	++	+
B10.HTG	g	d	d	d	b	-	++
AKR.L	oz2	b	k	k	k	+	-
A.TH	l2	s	s	s	d	++	+
CAS.1	w23	w23	w23	w23	w23	-	±
CAS.2	w17	w17	w17	w17	w3	-	±
STA.62	w27	w27	b	w27	w27	-	±
WR.7	w7	w7	w7	w7	k	±	-
WCA.105	w10	v	v	v	w10	++	-
BUA.19	w22	w16	w16	w16	k	±	-
BUA.1	w16	w16	w16	w16	w16	±	++