

Product datasheet for BM4095

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MHC Class II (I-A k,s,r) Rat Monoclonal Antibody [Clone ID: ER-TR2]

Product data:

Product Type: Primary Antibodies

Clone Name: ER-TR2
Applications: FC, IHC

Recommended Dilution: Immunohistochemistry on Frozen Sections: 1 µg/ml (1/200).

Suggested Positive Control: Mouse spleen. Has been described to work in FACS.

Does not react on routinely processed paraffin sections.

Reactivity: Mouse
Host: Rat
Isotype: IgG2b

Clonality: Monoclonal

Immunogen: Murine thymic reticulum

Remarks: MHC Class II antigens are heterodimers consisting of one α-chain (31-34kDa) and

one β-chain (26-29kDa). The epitope has not been further characterized.

Specificity: This antibody detects cells expressing MHC class II antigens.

Monoclonal antibody ER-TR2 is one member of a family of monoclonal antibodies (ER-TR3, ER-TR2, ER-TR1) which detect MHC class II antigens encoded by the murine Ia region of the H-2 complex. They are valuable tools for studying T helper cell interaction with class II positive antigen presenting cells (dendritic cells, B-cells, macrophages). These antibodies also offer new possibilities for studying the development of T helper cells since they also stain stromal

cells in the thymus.

Isolated cells: The antigen is found on dendritic cells, B-cells and macrophages. The level of antigen detected by ER-TR1, ER-TR2 and ER-TR3 differs from strain to strain (see table on

back)

Tissue Sections: The antigen is found on B-cells, interdigitating cells and macrophages in peripheral lymphoid organs but is absent from T-cells. It is also expressed as a fine reticular pattern on stromal thymic cells of the cortex and as a confluent pattern on stromal thymic

cells of the medulla.





MHC Class II (I-A k,s,r) Rat Monoclonal Antibody [Clone ID: ER-TR2] – BM4095

Formulation: Phosphate buffered saline, pH 7.2 (PBS)

State: Purified

State: Lyophilized purified Ig fraction

Stabilizer: 5 mg/ml BSA

Preservative: 0.05% Kathon CG

Reconstitution Method: Restore with 0.5 ml distilled water (=stock solution).

Concentration: 0.2 mg/ml (after reconstitution)

Purification: Affinity Chromatography

Conjugation: Unconjugated

Storage: Store lyophilized product at 2-8 °C.

Following reconstitution store (in aliqouts) at -20°C.

Avoid repeated freezing and thawing.

Stability: Shelf life: One year from despatch.

Note: Protocol: **Protocol with frozen, ice-cold acetone-fixed sections:**

The whole procedure is performed at room temperature

1. Wash in PBS

2. Block endogenous peroxidase

3. Wash in PBS

4. Block with 10 % normal goat serum in PBS for 30 min. in a humid chamber

5. Incubate with primary antibody (dilution see datasheet) for 1h in a humid chamber

6. Wash in PBS

7. Incubate with secondary antibody (peroxidase-conjugated goat anti rat IgG (H+L) minimal-

cross reaction to mouse) for 1h in a humid chamber

8. Wash in PBS

9. Incubate with AEC substrate (3-amino-9-ethylcarbazol) for 12min.

10. Wash in PBS

11. Counterstain with Mayer's hemalum



Product images:

Strain	Haplotype							Clone		
	K	Α	В	J	E	С	D	ER-TR1	ER-TR2	ER-TR3
C3H/HeJ	k	k	k	k	k	k	k	48*	46	46
AKR	k	k	k	k	k	k	k	54	52	54
B10.BR	k	k	k	k	k	k	k	59	58	62
B10.ScSn	b	b	b	b	b	b	b	4	5	50
Balb/b	b	b	b	b	b	b	b	4	3	39
B10.D2/n	d	d	d	d	d	d	d	56	5	54
Balb/c	d	d	d	d	d	d	d	45	3	44
DBA/2	d	d	d	d	d	d	d	27	4	47
B10.G	q	q	q	q	q	q	q	53	4	46
DBA/1	q	q	q	q	q	q	q	52	6	54
SWR/J	q	q	q	q	q	q	q	49	3	49
A.SW	s	s	S	S	S	S	S	4	20	6
B10.M	f	f	f	f	f	f	f	4	5	3
B10.RIII	r	r	r	Г	r	Г	r	39	39	40
B10.AQR	q	k	k	k	k	d	d	52	52	51
B10.T(6R)	q	q	q	q	q	q	d	50	3	52
A.TL	s	k	k	k	k	k	d	29	52	51
A.TH	s	s	S	S	s	S	d	5	49	7

^{*} Percentage of labelled cells, determined by FACS analysis of spleen cell suspensions

Distribution of ER-TR1, ER-TR2 and ER-TR3 among mouse strains with independent and recombinant haplotypes*