



BMA BIOMEDICALS

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FITC Labeled Monoclonal Antibody To Mouse MHC Class II

Monoclonal antibody ER-TR 3 is one member of a family of monoclonal antibodies (ER-TR 3, ER-TR 2, ER-TR 1) which detect MHC class II antigens encoded by the murine Ia region of the H-2 complex, corresponding to the human HLA-DR region. 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.

Product Number:	T-2117 (Lot 02PF0506)
Clone:	ER-TR3
Host species, isotype:	Rat IgG2b
Quantity:	100µg
Format:	Affinity purified, FITC labelled, liquid Supplied as 1ml solution. This stock solution contains 0.1mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 10mg/ml bovine serum albumin (BSA) as a stabilizer and 0.09% sodium azide as a preservative.
Stability:	Original vial: 6 months at 4° - 8°C
Applications:	Has been described to work in FACS. Approximate working dilution: Optimal dilutions should be determined by the end user. Suggested positive control: mouse spleen. Please see www.bma.ch for protocols and general information.
Immunogen:	Murine thymic reticulum.
Antigen, epitope:	MHC Class II antigens are heterodimers consisting of one α -chain(31-34kD) and one β -chain (26-29kD).
Antigen distribution	Isolated cells The antigen is found on dendritic cells, B-cells and macrophages. The level of antigen detected by ER-TR1, ER-TR 2 and ER-TR 3 differs from strain to strain (see table below). 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.

**Distribution of ER-TR 1, ER-TR 2 and ER-TR 3 among mouse strains
with independent and recombinant haplotypes***

Strain	Haplotype							Clone		
	K	A	B	J	E	C	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	r	r	r	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

Specificity: **Mouse:** cells expressing MHC class II antigens
Other: negative on human, other unknown

Selected references

- Van Vliet, E., et al.: Monoclonal Antibodies to Stromal Cell Types of the Mouse Thymus. *Eur. J. Immunol.* 14, 524-529 (1984)
- Van Vliet, E., et al.: Stromal Cell Types in the Developing Thymus of the Normal and Nude Mouse Embryo. *Eur. J. Immunol.* 15, 675-681 (1985)

For in vitro research only. Caution: this product contains sodium azide, a poisonous and hazardous substance.