

Hamster Anti-Mouse TCR $\alpha\beta$

Cat. No.	Form	Quantity
1785-01	Purified (UNLB) Antibody	0.5 mg
1785-02	Fluorescein (FITC) Conjugate	0.5 mg
1785-02S	Fluorescein (FITC) Conjugate	0.1 mg
1785-08	Biotin (BIOT) Conjugate	0.5 mg
1785-09	*R-phycoerythrin (R-PE) Conjugate	0.1 mg
1785-11	Allophycocyanin (APC) Conjugate	0.1 mg
1785-13	**Spectral Red™ (SPRD) Conjugate	0.1 mg
1785-14	Low Endotoxin, /Azide-Free (LE/AF)	0.5 mg
1785-16	***R-phycoerythrin-Cyanine 5.5 (R-PE-CY™5.5) Conjugate	0.1 mg
1785-30	**Alexa Fluor 488 (AF488) Conjugate	0.1 mg
1785-31	**Alexa Fluor 647 (AF647) Conjugate	0.1 mg

DESCRIPTION

Clone	H57-597
Ig Isotype	Armenian Hamster IgG
Immunogen	TCR affinity purified from mouse T-cell hybridoma DO-11.10 ¹
Specificity	Common epitope of the β chain of the mouse $\alpha\beta$ T cell receptor (TCR) complex

The $\alpha\beta$ TCR is expressed on T lymphocytes of all mouse strains tested.² The H57-597 monoclonal antibody does not react with $\gamma\delta$ TCR-bearing cells.² Plate-bound or soluble H57-597 activates $\alpha\beta$ TCR-bearing T cells.² *In vitro* and *in vivo*, H57-597 can induce immature thymocytes to undergo apoptosis.^{3,4} *In vivo* administration of H57-597 has been shown to deplete $\alpha\beta$ TCR-bearing cells to near completion and prevent graft rejection.⁵

RESEARCH APPLICATIONS

- Flow cytometry^{2,6,7}
- Immunohistochemistry¹⁰
- Immunoprecipitation^{2,8}
- *In vitro* stimulation of $\alpha\beta$ TCR-expressing T cells²
- *In vitro* and *in vivo* depletion of $\alpha\beta$ TCR-bearing cells⁹

CHARACTERIZATION

To ensure lot-to-lot consistency, each batch of monoclonal antibody is tested by flow cytometry to conform to characteristics of a standard reference reagent. Representative flow data are included in this product insert.

WORKING DILUTIONS

Flow Cytometry:	Fluorescein conjugate	$\leq 2 \mu\text{g}/10^6$ cells
	Biotin conjugate	$\leq 2 \mu\text{g}/10^6$ cells
	R-phycoerythrin conjugate	$\leq 0.2 \mu\text{g}/10^6$ cells
	Allophycocyanin conjugate	$\leq 0.2 \mu\text{g}/10^6$ cells
	Spectral Red™ conjugate	$\leq 0.2 \mu\text{g}/10^6$ cells
	R-phycoerythrin-Cyanine 5.5 conjugate	$\leq 0.2 \mu\text{g}/10^6$ cells
	AF488 and AF647	$\leq 0.2 \mu\text{g}/10^6$ cells

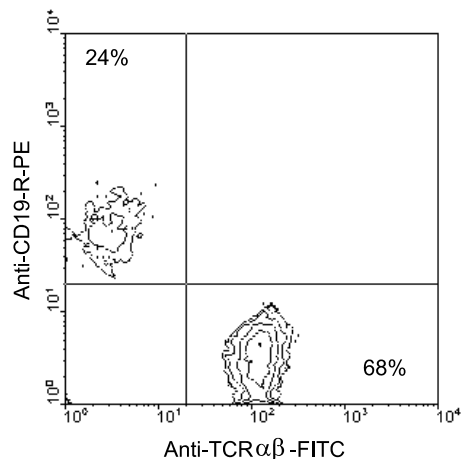
Other Applications: Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.

For Research Use Only. Not for Diagnostic or Therapeutic Use.

IMMUNOFLUORESCENT STAINING

Product: Hamster Anti-Mouse TCR $\alpha\beta$ -FITC
Cat No: 1785-02
Amount used: 1 $\mu\text{g}/10^6$ cells

BALB/c splenocytes were double-stained with hamster anti-mouse TCR $\alpha\beta$ -FITC and rat anti-mouse CD19-R-PE (Cat No. 1575-09, clone 6D5), gated on small lymphocytes and analyzed on a FACScan™ flow cytometer (BDIS, San Jose, CA).



HANDLING AND STORAGE

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of 100 mM borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg or 0.1 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (R-PE) and allophycocyanin (APC) conjugates are supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Spectral Red™ (SPRD) and R-phycoerythrin-Cyanine 5.5 (R-PE-CY™5.5) conjugates are supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of PBS. **Aliquot and store at or below -20°C.**
- The Alexa Fluor 488 (AF488) and Alexa Fluor 647 (AF647) conjugates are supplied as 0.1mg in 0.2mL of PBS/NaN₃. Store at 2-8°C.
- Protect conjugated forms from light. Aliquot and freeze the low endotoxin, azide-free product at -20°C immediately upon receipt. Each reagent is stable for the period shown on the bottle label if stored as directed.

WARNING

Reagents contain sodium azide. Sodium azide is very toxic if ingested or inhaled. Avoid contact with skin, eyes, or clothing. Wear eye or face protection when handling. If skin or eye contact occurs, wash with copious amounts of water. If ingested or inhaled, contact a physician immediately. Sodium azide yields toxic hydrazoic acid under acidic conditions. Dilute azide-containing compounds in running water before discarding to avoid accumulation of potentially explosive deposits in lead or copper plumbing.

REFERENCES

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*U.S. Patent 4,520,110; European Patent No. 76,695; and Canadian Patent No. 1,179,942.

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