

Rat Anti-Mouse CD25/IL-2R α

Cat. No.	Form	Quantity
1595-01	Purified (UNLB) Antibody	0.5 mg
1595-02	Fluorescein (FITC) Conjugate	0.5 mg
1595-02S	Fluorescein (FITC) Conjugate	0.1 mg
1595-08	Biotin (BIOT) Conjugate	0.5 mg
1595-09	R-phycoerythrin (R-PE) Conjugate	0.1 mg
1595-09L	R-phycoerythrin (R-PE) Conjugate	0.2 mg
1595-11	Allophycocyanin (APC) Conjugate	0.1 mg
1595-13	*Spectral Red™ (SPRD) Conjugate	0.1 mg
1595-14	Low Endotoxin, Azide-Free, (LE/AF)	0.5 mg
1595-17	**R-phycoerythrin-Cyanine 7 (R-PE-CY™7) Conjugate	0.1 mg

DESCRIPTION

Clone 7D4

Ig Isotype Rat (Lewis) IgM κ

Immunogen IL-2-dependent BALB/c mouse helper T-cell clone HT-2¹

Specificity Low affinity α chain IL-2 receptor (IL-2R α), Mr 55 kDa

The IL-2 receptor (IL-2R) exists in three alternative forms made up from the individual components of CD25, CD122, and CD132. CD25 represents the low affinity α chain of the IL-2R, a type I transmembrane glycoprotein containing two CCP domains. It is rich in O-linked carbohydrates and has a short cytoplasmic tail.² CD25 is expressed on activated T cells, B cells, NK cells and monocytes of all mouse strains tested.^{1, 3, 4} It is transiently expressed at a low level during B-cell development in bone marrow on the CD45R/B220^{low} TdT⁻ slg⁻ pre-B II and CD45R/B220^{low} TdT⁻ slgM⁺slgD⁻ immature B cells, but not on the CD45R/B220^{low} TdT⁺ slg⁻ pro-B/pre-B I stage nor on CD45R/B220^{high} TdT⁻ slgM⁺slgD⁺ mature B cells.^{5, 6} CD25 is expressed at a higher level during very early T-cell development in fetal and adult thymus.^{6, 7} The 7D4 monoclonal antibody reacts with an epitope between amino acids 125 and 212 that is distinct from that recognized by the monoclonal antibody 3C7 (Cat. No. 1600-XX). While the monoclonal antibody 7D4 does not block the binding of IL-2 to CD25, when used in combination with the monoclonal antibody 3C7 it results in higher levels of inhibition of IL-2-driven proliferation than either of these two monoclonal antibodies alone.^{3, 8, 9}

RESEARCH APPLICATIONS

- Flow cytometry^{1, 3, 4, 7, 8}
- Immunoprecipitation^{1, 3}

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 data are included in this product insert.

WORKING DILUTIONS

Flow Cytometry:	Fluorescein conjugate	≤ 1 μ g/10 ⁶ cells
	Biotin conjugate	≤ 1 μ g/10 ⁶ cells
	R-phycoerythrin conjugate	≤ 0.2 μ g/10 ⁶ cells
	Allophycocyanin conjugate	≤ 0.2 μ g/10 ⁶ cells
	Spectral Red™ conjugate	≤ 0.2 μ g/10 ⁶ cells
	R-phycoerythrin-Cyanine 7 conjugate	≤ 0.2 μ 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.

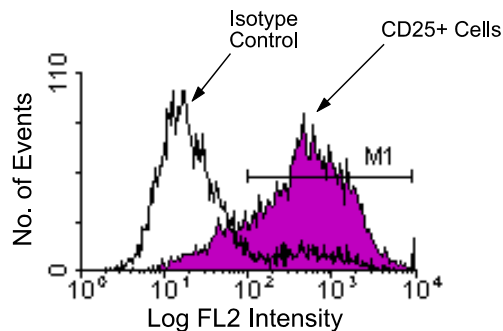
IMMUNOFLUORESCENT STAINING

Product: Rat Anti-Mouse CD25-R-PE

Cat No: 1595-09

Amount used: 0.1 µg/10⁶ cells

Cells from BALB/c spleen were activated by PMA (10 ng/ml) and ionomycin (400 ng/ml) for 48 hours, then stained with anti-CD25-FITC 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) conjugate is supplied as 0.1 mg in 1.0 mL or 0.2 mg in 2.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The allophycocyanin (APC) conjugate is 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 7 (R-PE-CY™7) 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.**
- 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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9. Lorenzo, F., C. Jaulin, N. Vita., P. Froussard, P. Ferrara, D. Jankovic, and J. Theze. *J. Immunol.* 147:2970.

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