

Monoclonal Antibody to CD25 / IL2RA - PE

Alternate names:	IL-2 receptor alpha subunit, IL-2-RA, IL2-RA, Interleukin-2 receptor alpha chain, TAC antigen, p55
Catalog No.:	AM08035RP-S
Quantity:	0.1 mg
Concentration:	0.1 mg/ml
Background:	<p>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 alpha 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. (Ref.2) CD25 is expressed on activated T cells, B cells, NK cells and monocytes of all mouse strains tested. (Ref.1,3,4) It is transiently expressed at a low level during B-cell development in bone marrow on the CD45R/B220low TdT- sIg- pre-B II and CD45R/B220low TdT- sIgM+sIgD- immature B cells, but not on the CD45R/B220low TdT+ sIg- pro-B/pre-B I stage nor on CD45R/B220high TdT- sIgM+sIgD+ mature B cells. (Ref.5,6) CD25 is expressed at a higher level during very early T-cell development in fetal and adult thymus. (Ref.6,7)</p>
Uniprot ID:	P01590
NCBI:	NP_032393.3
GeneID:	16184
Host / Isotype:	Rat / IgM
Clone:	7D4
Immunogen:	IL-2-dependent BALB/c mouse helper T-cell clone HT-2. (Ref.1)
Format:	State: Liquid purified Ig fraction. Buffer System: PBS containing 0.09% Sodium Azide as preservative and a stabilizing agent. Label: PE – R-Phycoerythrin
Applications:	Flow Cytometry: < / = 0.2 µg/10e6 cells. (Ref.1,3,7,8) Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody is specific to Low affinity alpha chain IL-2 Receptor (IL-2Ra), Mr 55 kDa. 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. 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. (Ref.3,8,9) Species: Mouse. Other species not tested.

For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Antibody Hotline - Technical Questions - Antibody Location Service
Free Call: 0800-2274746 (Germany only) - www.acris-antibodies.com



Storage:

Store the antibody undiluted at 2-8°C.

DO NOT FREEZE!

This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:

1. Malek, T. R., R. J. Robb, and E. M. Shevach. 1983. Proc. Natl. Acad. Sci. U. S. A. 80:5694.
2. Leonard, W.J., et al. 1984. Nature 311:626.
3. Ortega, G., R. J. Robb, E. M. Shevach, and T. R. Malek. 1984. J. Immunol. 133:1970.
4. Malek, T. R., J. A. Schmidt, and E. M. Shevach. 1985. J. Immunol. 134:2405.
5. Rolink, A., U. Grawunder, T.H. Winkler, H. Karasuyama, and F. Melchers. 1994. Int. Immunol. 6:1257.
6. Chen, J., A. Ma, F. Young, and F. W. Alt. 1994. International. Immunology 6:1265.
7. Habu, S., K. Okumura, T. Diamantstein, and E. M. Shevach. 1985. Eur. J. Immunol. 15:456.
8. Moreau, J. L., M. Nabholz, T. Diamantstein, T. R. Malek, E. Shevach, and J. Theze. 1987. Eur. J. Immunol. 17:929.
9. Lorenzo, F., C. Jaulin, N. Vita., P. Froussard, P. Ferrara, D. Jankovic , and J. Theze. J. Immunol. 147:2970.

Pictures:

Immunofluorescent Staining: 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(TM) flow cytometer (BDIS, San Jose, CA). Amount Used: 0.1 µg/10e6 cells.

