

## Product datasheet for **AM08035BT-N**

### IL2ra Rat Monoclonal Antibody [Clone ID: 7D4]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	7D4
Applications:	FC
Recommended Dilution:	<b>Flow Cytometry:</b> < / = 1 µg/10e6 cells. (Ref.1,3,7,8)
Reactivity:	Mouse
Host:	Rat
Isotype:	IgM
Clonality:	Monoclonal
Immunogen:	IL-2-dependent BALB/c mouse helper T-cell clone HT-2. (Ref.1)
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)
Formulation:	PBS containing 0.09% Sodium Azide as preservative. Label: Biotin State: Liquid purified Ig fraction.
Concentration:	lot specific
Conjugation:	Biotin
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	interleukin 2 receptor, alpha chain
Database Link:	<a href="#">Entrez Gene 16184 Mouse P01590</a>



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**Background:**

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)

**Synonyms:**

Interleukin-2 receptor alpha chain, IL-2 receptor alpha subunit, IL-2-RA, IL2-RA, p55, TAC antigen