

# Product datasheet for TA386527

## Il2ra Rabbit Monoclonal Antibody [Clone ID: 20000]

## **Product data:**

#### **Product Type: Primary Antibodies Clone Name:** 20000 FC **Applications: Reactivity:** Mouse Host: Rabbit Isotype: IgG, kappa **Clonality:** Monoclonal Immunogen: The original version of this antibody was raised to recognize mouse CD25. Specificity: 2E4 recognizes mouse CD25. This epitope is distinct from the IL-2 binding site and does not block binding of IL-2 to CD25. This antibody binds the same or overlapping epitope as 7D4 (Ab02216) but different than Ab01107. Murine CD25 is a 55 kDa interleukin-2 receptor alpha chain (IL-2R alpha). CD25 is expressed by early progenitors of the T and B lineage as well as by activated mature T and B lymphocytes. By itself, CD25 binds IL-2 only with low affinity. However, CD25 associates with CD122 (IL-2 receptor beta chain) and CD132 (common gamma chain) to form the high affinity IL-2 receptor. 2E4 is a non-IL-2 blocking anti-CD25 antibody. The variable fragment (Fv) of this antibody conjugated to a 38-kDa portion of Pseudomonas exotoxin A exhibited exceptional ability to induce tumor rejection and lasting antitumor immunitiy in mice making it a promising canditate in the immunotherapy research and developemnt (Onda et al., 2019; pmid: 30760587). This 2E4 Fv-based CD25-specific recombinant immunotoxin (RIT) was injected into three different mouse tumor models and brought about complete regressions of the majority of them leadinig, in many cases, to immunity against tumors' reinjections and cross-tumor type immunity (Onda et al., 2019; pmid: 30760587). Finally, it was demonstrated that this immunotoxin (RIT) caused significant depletion of regulatory T cells (Tregs) in the tumor environment but, importantly, not in the spleen; at the same time, the number of effector, cytotoxic CD8 cells in the tumor increased what would suggest the possible antitumour mechanism of this immunotoxin (Onda et al., 2019; pmid: 30760587). Additionally, 2E4 can be used in flow cytometric analyses; for instance, it has been used to perform phenotyping of lymphocytes as a part of a wider panel of antibodies (Alexander et al., 2008; pmid: 18824594). Formulation: PBS with 0.02% Proclin 300.

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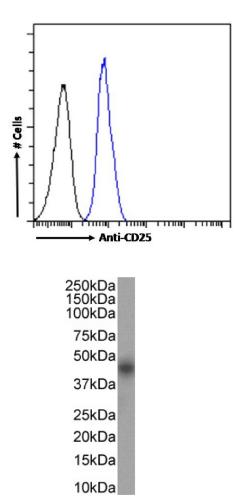
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	ll2ra Rabbit Monoclonal Antibody [Clone ID: 20000] – TA386527
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Please store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C. Avoid freeze and thaw cycles.
Stability:	3 years from dispatch.
Gene Name:	interleukin 2 receptor, alpha chain
Database Link:	<u>Entrez Gene 16184 Mouse</u> <u>P01590</u>
Synonyms:	CD25; IDDM10; IL-2-RA; IL2-RA; IL2R; p55; TCGFR
Note:	This chimeric rabbit antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

## **Product images:**



Flow cytometry using the Anti-CD25 antibody 2E4 (TA386527). Paraformaldehyde fixed mouse splenocytes permeabilized with 0.5% Triton were stained with anti-unknown specificity antibody ([TA385792]; isotype control, black line) or the rabbit IgG version of 2E4 (TA386527, blue line) at a dilution of 1:100 for 1h at RT. After washing, the bound antibody was detected using a goat antirabbit IgG AlexaFluor® 488 antibody at a dilution of 1:1000 and cells analyzed using a FACSCanto flow-cytometer.

Western Blot using Anti-CD25 antibody 2E4 (TA386527). Mouse lymph node tissue lysates (35µg protein in RIPA buffer) were resolved on a SDS PAGE gel and blots were probed with the chimeric rabbit version of 2E4 (TA386527) at 0.5 µg/ml before detection using an anti-rabbit secondary antibody. A primary incubation of 1h was used and protein was detected by chemiluminescence.

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