

Product datasheet for **TA386243**

Il2ra Rat Monoclonal Antibody [Clone ID: PC-61.5.3]

Product data:

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| Product Type: | Primary Antibodies |
| Clone Name: | PC-61.5.3 |
| Applications: | ELISA, FC, FN, IF, WB |
| Reactivity: | Mouse |
| Host: | Rat |
| Isotype: | IgG2a, lambda |
| Clonality: | Monoclonal |
| Immunogen: | This antibody was raised by immunising rats with the B6.1 mouse cytotoxic T cell line, followed by fusing spleen cells with P3X63Ag8.653 myeloma cells. |



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| Specificity: | <p>This antibody is specific for murine CD25, the 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. Binding of IL-2 to both the high and low affinity classes of IL-2 receptor is inhibited by the PC61.5 antibody.</p> <p>This antibody has been used in numerous FACS analyses, for instance, to demonstrate that glycolysis and glutaminolysis cooperatively control T cell function by limiting metabolite supply to N-glycosylation (Araujo et al, 2017), to suggest that IL-2C could be a potential therapeutic method to alleviate excessive inflammation and maintain blood vessel stability after traumatic brain injury (Gao et al, 2017), and to evaluate how alternative splicing of MALT1 controls signalling and activation of CD4(+) T cells (Meininger et al, 2016). This antibody has also been used in immunofluorescence as part of the DNA Aβ42 immunization studies in mice (Lambracht-Washington et al, 2015), in ELISA assays to investigate the dynamics of T cell receptor (TCR)-dependent signaling networks (Brockmeyer et al, 2011), and in Western Blot to determine the effects of increased p300 expression on glucocorticoid receptor (GR)-T-cell-receptor (TCR) crosstalk between thymocytes (Yu et al, 2002). In addition, this antibody has been used in various in vivo functional studies, for instance, to suggest that a combination of local anti-CTLA-4 antibody production with systemic Treg depletion could enhance antitumor immune responses (Tuve et al, 2007), to provide a new insight into infection-associated tumorigenesis and illustrate the importance of antibiotic therapy to treat tumors with bacterial infiltration (Huang et al, 2007), and to demonstrate that CD4+CD25+ T cells may downregulate the development of glomerulonephritis during the preactive phase in B/WF1 mice (Hayashi et al, 2005).</p> |
| Formulation: | PBS with 0.02% Proclin 300. |
| 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: | Entrez Gene 16184 Mouse P01590 |
| Synonyms: | CD25; IDDM10; IL-2-RA; IL2-RA; IL2R; p55; TCGFR |
| Note: | This reformatted rat antibody was made using the variable domain sequences of the original Rat IgG1 format, for improved compatibility with existing reagents, assays and techniques. |