# Anti-Human CD25 Antibody, Clone 2A3, PE

## Antibodies

Mouse monoclonal IgG1 antibody against human, cynomolgus CD25, PE-conjugated

Catalog #60153PE 50 tests 20 µL/test

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## Product Description

The 2A3 antibody reacts with human CD25, a 55 kDa type I integral transmembrane glycoprotein also known as low-affinity interleukin-2 receptor alpha chain (IL-2Rα) or Tac antigen. CD25 is present on activated T and B cells, monocytes, macrophages, and regulatory T cells. CD25 has a role in T-lymphocyte activation and can be used in the identification of T-cell subsets in viral infections like HIV and HTLV. CD25 associates with IL-2 receptor β (CD122) and common γ (CD132) chains to form a high affinity IL-2R complex. The 2A3 antibody binds to an epitope on p55 at or near the IL-2 binding site and prevents high-affinity IL-2 binding to T lymphocytes. Daclizumab, a therapeutic humanised monoclonal antibody, blocks the binding of 2A3 antibody.

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| Target Antigen Name: | CD25 |
| Alternative Names: | Interleukin 2 receptor alpha (IL-R2α), Low affinity IL-2R, p55, Tac |
| Gene ID: | 100 |
| Species Reactivity: | Human, Cynomolgus, Common marmoset, Pigtailed macaque, Squirrel monkey |
| Host Species: | Mouse (BALB/c) |
| Clonality: | Monoclonal |
| Clone: | 2A3 |
| Isotype: | IgG1, kappa |
| Immunogen: | Human phytohemagglutinin-activated T cells |
| Conjugate: | PE |

## Applications

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| Verified: | FC |
| Reported: | FACS, FC |

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

## Properties

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| Formulation: | Phosphate-buffered saline containing 0.1% sodium azide and gelatin |
| Purification: | The antibody was purified by column chromatography. |
| Stability and Storage: | Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. For product expiry date, please contact techsupport@stemcell.com. |
| Directions for Use: | For flow cytometry the suggested use of this antibody is 20 µL per 1 x 10^6 cells in 100 µL volume. It is recommended that the antibody be titrated for optimal performance for each application. |

## Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

## References

1. Rech AJ et al. (2012) CD25 blockade depletes and selectively reprograms regulatory T cells in concert with immunotherapy in cancer patients. Sci Transl Med 4(134): 134ra62. (FC)
2. Ahmadzadeh M & Rosenberg SA. (2006) IL-2 administration increases CD4+ CD25(hi) Foxp3+ regulatory T cells in cancer patients. Blood 107(6): 2409–14. (FACS)
3. Krueger JG et al. (2000) Successful in vivo blockade of CD25 (high-affinity interleukin 2 receptor) on T cells by administration of humanized anti-Tac antibody to patients with psoriasis. J Am Acad Dermatol 43(3): 448–58. (FC)
4. Anasetti C et al. (1990) A phase I-II study evaluating the murine anti-IL-2 receptor antibody 2A3 for treatment of acute graft-versus-host disease. Transplantation 50(1): 49–54.
5. Urdal DL et al. (1984) Purification and chemical characterization of the receptor for interleukin 2 from activated human T lymphocytes and from a human T-cell lymphoma cell line. Proc Natl Acad Sci USA 81(20): 6481–5.

Please refer to the Safety Data Sheet (SDS) for hazard information.