Anti-Mouse CD25 Antibody, Clone PC61.5, Biotin

Antibodies

Rat monoclonal IgG1 antibody against mouse CD25, biotin-conjugated

Catalog	#60009BT	500 µg	0.5 mg/mL
	#60009BT.1	100 µg	0.5 mg/mL
	#60009BT.2	25 µg	0.5 mg/mL

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Product Description

The PC61.5 antibody reacts with murine CD25 (low affinity interleukin-2 receptor α chain or IL-2Rα), an ~55 kDa type 1 transmembrane glycoprotein expressed on T and B cell progenitors, activated (but not resting) T and B cells, T regulatory (Treg) cells, dendritic cells, and activated monocytes and macrophages. Expression of CD25, together with CD4 and FOXP3, is considered a phenotypic signature for Treg cells. CD25 per se has low affinity for its IL-2 ligand but associates with CD122 (IL-2Rβ) and CD132 (IL-2Rγ) to form the high affinity IL-2R receptor. CD25 acts to increase the specificity and affinity of IL-2 binding by the receptor and is necessary for receptor clustering and induction of signaling pathways involved in the activation and proliferation of lymphocytes. Binding of the PC61.5 antibody inhibits binding of IL-2 to the low and high affinity receptors, which may result in inhibition of IL-2-dependent proliferation. The epitope recognized by PC61.5 is distinct from the IL-2 binding site and from the epitopes recognized by antibodies 7D4 and 3C7.

Target Antigen Name:	CD25
Alternative Names:	Interleukin-2 receptor subunit alpha, IL-2 receptor subunit alpha, IL-2Ra, IL-2Ralpha, IL-2-RA, Ly-43, p55, Tac
Gene ID:	16184
Species Reactivity:	Mouse
Host Species:	Rat (OFA)
Clonality:	Monoclonal
Clone:	PC61.5
Isotype:	IgG1, lambda
Immunogen:	IL-2-dependent cytolytic mouse T-cell clone B6.1
Conjugate:	Biotin

Applications

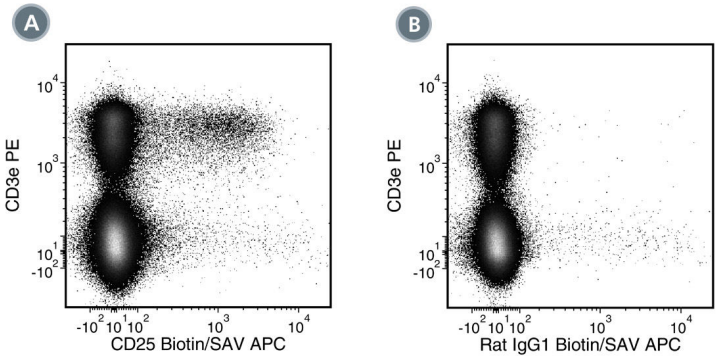
Verified:	FC
Reported:	FC, IHC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Mouse T Cell Isolation Kit (Catalog #19851).

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

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Purification:	The antibody was purified by affinity chromatography and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact techsupport@stemcell.com.
Directions for Use:	For flow cytometry the suggested use of this antibody is ≤ 0.25 µg per 1 x 10^6 cells in 100 µL volume. It is recommended that the antibody be titrated for optimal performance for each application.

Data



(A) Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD25 Antibody, Clone PC61.5, Biotin, followed by streptavidin (SAV) APC and Anti-Mouse CD3e Antibody, Clone 145-2C11, PE (Catalog #60015PE).
(B) Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with a biotinylated rat IgG1 isotype control antibody followed by SAV APC and Anti-Mouse CD3e Antibody, Clone 145-2C11, PE.

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

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