Antibodies	Anti-Human CD25 Antibody, Clone BC96, Biotin	
	Mouse monoclonal IgG1 antibody against human, rhesus, cynomolgus CD25, biotin-conjugated	Scientists Helping Scientists <sup>™</sup>   WWW.STEMCELL.COM TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713
Catalog #60158BT	100 μg 0.5 mg/mL	INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

### **Product Description**

The BC96 antibody reacts with human CD25, a 55 kDa type I integral transmembrane glycoprotein. CD25 is involved in the activation and proliferation of lymphocytes and can be used in the identification of T cell subsets in viral infections like HIV and HTLV. CD25 is present on activated T and B cells, monocytes, macrophages, and regulatory T cells. Expression of CD25, together with CD4 and FOXP3, is considered a phenotypic signature for regulatory T cells. CD25 has a low affinity for its IL-2 ligand but associates with IL-2 receptor  $\beta$  (CD122) and common  $\gamma$  (CD132) chains to form a high affinity IL-2 receptor.

Target Antigen Name:	CD25
Alternative Names:	IL-2 Receptor alpha chain, IL-2Ra, IL2Ra, Tac, p55
Gene ID:	3559
Species Reactivity:	Human, Rhesus, Cynomolgus, Baboon, Chimpanzee, Pig-tailed Macaque
Host Species:	Mouse
Clonality:	Monoclonal
Clone:	BC96
Isotype:	IgG1, kappa
Immunogen:	CD25 protein of human origin
Conjugate:	Biotin

# Applications

Verified:	FC
Reported:	FC
Special Applications:	This antibody clone has been verified for analyzing CD25 antigen expression on cultured human T cells activated with ImmunoCult™ Human CD3/CD28 T Cell Activator (Catalog #10971) and ImmunoCult™ Human CD3/CD28/CD2 T Cell Activator (Catalog #10970).

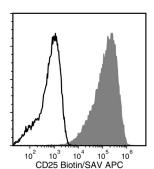
Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: 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 $\leq$ 0.5 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



Flow cytometry analysis of PHA-L-activated human peripheral blood mononuclear cells (PBMCs) labeled with Anti-Human CD25 Antibody, Clone BC96, Biotin, followed by streptavidin (SAV) APC (filled histogram), or Mouse IgG1, kappa Isotype Control Antibody, Clone MOPC-21, Biotin (Catalog #60070BT), followed by SAV APC (solid line histogram).

# 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. Legorreta-Haquet MV et al. (2016) Function of Treg cells decreased in patients with systemic lupus erythematosus due to the effect of prolactin. Medicine 95(5): e2384. (FC)

 Fuhrman CA et al. (2015) Divergent phenotypes of human regulatory T cells expressing the receptors TIGIT and CD226. J Immunol 195(1): 145–55. (FC)
Smigielska-Czepiel K et al. (2013) Dual role of miR-21 in CD4+ T-cells: Activation-induced miR-21 supports survival of memory T-cells and regulates CCR7 expression in naive T-cells. PLoS One 8(10): 1–10. (FC)

4. Sugiyama D et al. (2013) Anti-CCR4 mAb selectively depletes effector-type FoxP3+CD4+ regulatory T cells, evoking antitumor immune responses in humans. Proc Natl Acad Sci USA 110(44): 17945–50. (FC)

5. Ardolino M et al. (2011) DNAM-1 ligand expression on Ag-stimulated T lymphocytes is mediated by ROS-dependent activation of DNA-damage response: Relevance for NK-T cell interaction. Blood 117(18): 4778–86. (FC)

6. Dokouhaki P et al. (2010) Adoptive immunotherapy of cancer using ex vivo expanded human γδ T cells: A new approach. Cancer Lett 297(1): 126–36. (FC)

7. Kmieciak M et al. (2009) Human T cells express CD25 and Foxp3 upon activation and exhibit effector/memory phenotypes without any regulatory/suppressor function. J Transl Med 7(1): 89. (FC)

8. Schaue D et al. (2008) T-cell responses to survivin in cancer patients undergoing radiation therapy. Clin Cancer Res 14(15): 4883–90. (FC)

STEMCELL TECHNOLOGIES INC.'S QUALITY MANAGEMENT SYSTEM IS CERTIFIED TO ISO 13485. PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED.

Copyright © 2016 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design, Scientists Helping Scientists, and ImmunoCult are trademarks of STEMCELL Technologies Inc. All other trademarks are the property of their respective holders. Alexa Fluor® is a registered trademark of Life Technologies Corporation. This product is licensed for internal research use only and its sale is expressly conditioned on the buyer not using it for manufacturing, performing a service, or medical test, or otherwise generating revenue. For use other than research, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@lifetch.com. While STEMCELL has made all reasonable efforts to ensure that the information provided by STEMCELL and its suppliers is correct, it makes no warranties or representations as to the accuracy or completeness of such information.