PRODUCT INFORMATION

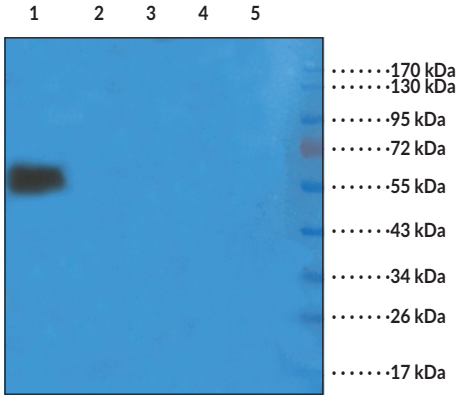
CD25/Interleukin-2Rα Chimeric Monoclonal Antibody (aa 116-122) (Basiliximab)

Item No. 37170

Overview and Properties

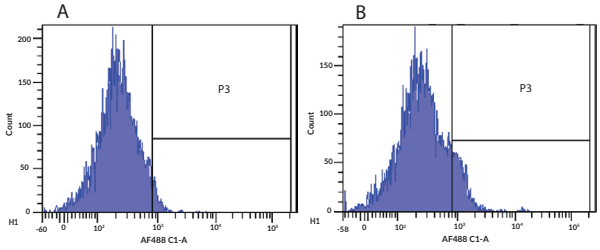
Contents:	This vial contains 200 µg of protein A-affinity purified monoclonal antibody
Synonyms:	p55, Cluster of Differentiation 25, Interleukin-2 Receptor Subunit α, ILR2α, Tac
Immunogen:	Recombinant human CD25/IL-2Rα
Cross Reactivity:	(+) CD25
Species Reactivity:	(+) Human, cynomolgus monkey, rhesus monkey
Uniprot No.:	P01589
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS with 0.02% ProClin™ 300
Host:	Chimeric monoclonal antibody
Isotype:	IgG1κ
Applications:	Flow cytometry (FC), Immunofluorescence (IF), Immunohistochemistry (IHC), and Western blot (WB); The optimal working concentration/dilution should be determined empirically.

Images

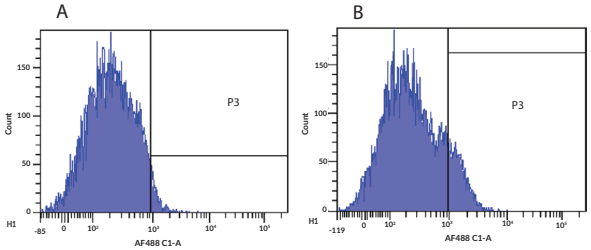


Lane 1: Human thyroid cancer
Lane 2: Rat spleen
Lane 3: Mouse lymph node
Lane 4: Mouse thymus
Lane 5: Rat small intestines

WB using CD25/Interleukin-2Rα Chimeric Monoclonal Antibody (aa 116-122) (Basiliximab). Samples were resolved on a 10% SDS PAGE gel and blots probed with CD25/Interleukin-2Rα Chimeric Monoclonal Antibody (aa 116-122) (Basiliximab) at 1 µg/ml before being detected by a secondary antibody.



Flow-cytometric analysis using CD25/Interleukin-2Rα Chimeric Monoclonal Antibody (aa 116-122) (Basiliximab). Rhesus monkey lymphocytes were stained with an isotype control (panel A) or the rabbit-chimeric version of basiliximab (panel B) at a concentration of 1 µg/ml for 30 mins at RT. After washing, bound antibody was detected using a AF488-conjugated donkey anti-rabbit antibody and cells analyzed on a FACSCanto™ flow cytometer.



Flow-cytometric analysis using CD25/Interleukin-2Rα Chimeric Monoclonal Antibody (aa 116-122) (Basiliximab). Cynomolgus monkey lymphocytes were stained with an isotype control (panel A) or the rabbit-chimeric version of basiliximab (panel B) at a concentration of 1 µg/ml for 30 mins at RT. After washing, bound antibody was detected using an AF488-conjugated donkey anti-rabbit antibody and cells analyzed on a FACSCanto™
flow cytometer.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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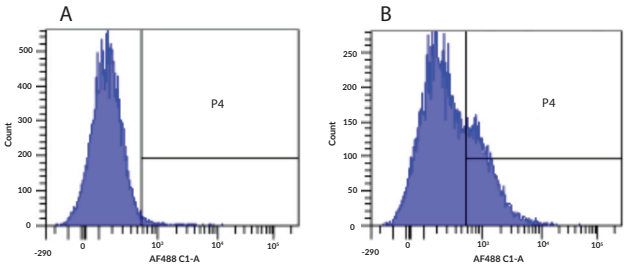
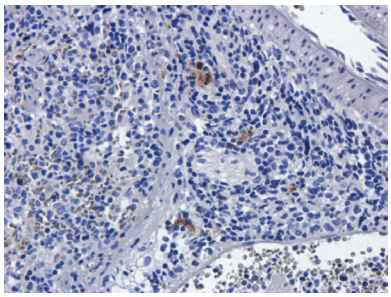
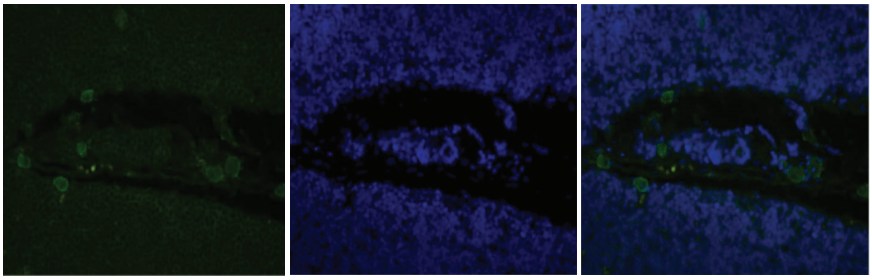


Flow-cytometric analysis using CD25/Interleukin-2Rα Chimeric Monoclonal Antibody (aa 116-122) (Basiliximab). Human lymphocytes were stained with an isotype control (panel A) or the rabbit-chimeric version of basiliximab (panel B) at a concentration of 1 µg/ml for 30 mins at RT. After washing, bound antibody was detected using an AF488-conjugated donkey anti-rabbit antibody and cells analyzed on a FACSCanto™ flow cytometer.



Immunohistochemical (IHC) staining of formalin-fixed rat spleen slices using CD25/Interleukin-2Rα Chimeric Monoclonal Antibody (aa 116-122) (Basiliximab) at 5 µg/ml. CD25/Interleukin-2Rα Chimeric Monoclonal Antibody (aa 116-122) (Basiliximab) shows some cross-reactivity with rat in IHC.



Immunofluorescent (IF) staining of rat thymus with Cayman's CD25/Interleukin-2Rα Chimeric Monoclonal Antibody (aa 116-122) (Basiliximab). Formaldehyde-fixed rat thymus slices were stained with CD25/Interleukin-2Rα Chimeric Monoclonal Antibody (aa 116-122) (Basiliximab) at 5 µg/ml and detected with a FITC-conjugated secondary antibody. CD25/Interleukin-2Rα Chimeric Monoclonal Antibody (aa 116-122) (Basiliximab) shows weak labeling of rat cells by IF.

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Description

CD25, also known as interleukin-2 receptor α (IL-2Rα), is a transmembrane glycoprotein.[1] It is composed of two domains, D1 and D2, and associates with the CD122/IL-2β and CD132/IL-2γc subunits to form the heterotrimeric IL-2 receptor. CD25 is expressed in activated T and B cells, regulatory T cells, and lymphokine-activated killer (LAK) cells.[2-4] Activation of IL-2R on T cells increases the expression of CD25 and leads to T cell proliferation and differentiation, as well as activation-induced T cell death.[3,4] *ILR2A* expression and CD25 protein levels in bone marrow are increased in patients with acute myeloid leukemia (AML) and associated with poor prognosis.[3] SNPs in *ILR2A* and elevated serum levels of a soluble form of CD25 are associated with an increased risk of Graves' disease.[5] Cayman's CD25/Interleukin-2Rα Chimeric Monoclonal Antibody (aa 116-122) (Basiliximab) was produced recombinantly from the original human-murine chimeric antibody and can be used for flow cytometry (FC), immunofluorescence (IF), immunohistochemistry (IHC), and Western blot (WB). The original antibody was generated by fusing human IgG1κ constant domains to the antigen-binding domain of a mouse anti-CD25 monoclonal antibody, which targets the ERIYHV peptide corresponding to amino acids 116 to 122 of human CD25.[6,7]

References

1. Stauber, D.J., Debler, E.W., Horton, P.A., *et al.* Crystal structure of the IL-2 signaling complex: Paradigm for a heterotrimeric cytokine receptor. *Proc. Natl. Acad. Sci. USA* **103(8)**, 2788-2793 (2006).
2. Volkó, J., Kenesei, Á., Zhang, M., *et al.* IL-2 receptors preassemble and signal in the ER/Golgi causing resistance to antiproliferative anti-IL-2Rα therapies. *Proc. Natl. Acad. Sci. USA* **116(42)**, 21120-21130 (2019).
3. Li, J., Ran, Q., Xu, B., *et al.* Role of CD25 expression on prognosis of acute myeloid leukemia: A literature review and meta-analysis. *PLoS One* **15(7)**, e0236124 (2020).
4. Waldmann, T.A. The IL-2/IL-2 receptor system: A target for rational immune intervention. *Immunol. Today* **14(6)**, 264-270 (1993).
5. Lee, H.J., Li, C.W., Hammerstad, S.S., *et al.* Immunogenetics of autoimmune thyroid diseases: A comprehensive review. *J. Autoimmun.* **64**, 82-90 (2015).
6. Kovarik, J., Wolf, P., Cisterne, J.M., *et al.* Disposition of basiliximab, an interleukin-2 receptor monoclonal antibody, in recipients of mismatched cadaver renal allografts. *Transplantation* **64(12)**, 1701-1705 (1997).
7. Binder, M., Vögtle, F.-N., Michelfelder, S., *et al.* Identification of their epitope reveals the structural basis for the mechanism of action of the immunosuppressive antibodies basiliximab and daclizumab. *Cancer Res.* **67(8)**, 3518-3523 (2007).

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