



CD25 Monoclonal Antibody (PC61.5), PerCP-Cyanine5.5, eBioscience™

Catalog Number

45-0251-80

Product data sheet

Catalog Hamber 40 0201				
Details		Species Reactivity		
Size	25 μg	Species reactivity	Mouse	
Host/Isotope	Rat / IgG1, lambda	Published species	Mouse, Human, Not Applicable	
Class	Monoclonal	Tested Applications	Dilution *	
Туре	Antibody	Flow Cytometry (Flow)	0.25 μg/test	
Clone	PC61.5	Published Applications		
Conjugate	PerCP-Cyanine5.5	Flow Cytometry (Flow)	See 33 publications below	
Form	Liquid	Functional Assay (FN)	See 2 publications below	
Concentration	0.2 mg/mL		* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own	
Purification	Affinity chromatography	experiment using appropriate negative and positive control	rols.	
Storage buffer	PBS, pH 7.2			
Contains	0.09% sodium azide			
Storage Conditions	4° C, store in dark, DO NOT FREEZE!			

Product specific information

Description: The PC61.5 antibody reacts with mouse 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. CD25 plays a role in lymphocyte differentiation and activation /proliferation. Applications Reported: This PC61.5 antibody has been reported for use in flow cytometric analysis. Applications Tested: This PC61.5 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.25 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest. Excitation: 488 nm; Emission: 695 nm; Laser: Blue Laser. Filtration: 0.2 µm post-manufacturing filtered.

Background/Target Information

CD25 (IL2 receptor alpha chain/IL2RA) is a cytokine that plays a role in the proliferation of T and B lymphocytes. The receptor of this cytokine (IL2RA) is a heterotrimeric protein complex with a gamma chain also shared by interleukin 4 (IL4) and interleukin 7 (IL7). IL2RA, IL2R beta chain (IL2RB), and the IL2R gamma chain (IL2RG), constitute the high-affinity IL2 receptor. Homodimeric IL2RA chains result in low-affinity receptor, while homodimeric IL2RB chains produce a medium-affinity receptor. The expression of IL2 in mature thymocytes is monoallelic, which represents an unusual regulatory mode for controlling the precise expression of a single gene. IL2 is primarily produced by mature T cells. IL2 plays an important role as a growth factor, differentiation factor, and regulator of cell death. IL-2 stimulates the proliferation of B cells, augments natural killer cell activity, and inhibits granulocyte macrophage colony formation. The targeted disruption of a similar gene in mice leads to ulcerative colitis-like disease, which suggests a role in the immune response to antigenic stimuli. Mutations in this gene are associated with interleukin 2 receptor alpha deficiency.

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation in its warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample unrisited to Buyer is mently illustrative of the general type and quality of goods and does not represent that any Product will common any proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample.

Product Images For CD25 Monoclonal Antibody (PC61.5), PerCP-Cyanine5.5, eBioscience™

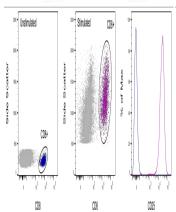
CD25 PerCP-Cy5.5

CD4 FITC

CD4 FITC

CD25 Antibody (45-0251-80) in Flow

Staining of SJL splenocytes with Anti-Mouse CD4 FITC (Product # 11-0042-82) and $0.125 \mu g$ of Rat IgG1 K Isotype Control PerCP-Cyanine5-5 (Product # 45-4301-80) (left) or $0.125 \mu g$ of Anti-Mouse CD25 PerCP-Cyanine5-5 (right). Cells in the lymphocyte gate were used for analysis.



CD25 Antibody (45-0251-80)

Staining of stimulated mouse splenocytes. As expected based on known expression patterns, CD25 clone PC61.5 staining is significantly increased in CD8+ T cells after stimulation. Details: Mouse splenocytes were unstimulated (blue histogram) or stimulated for 2 days with CD3 (clone 145-2C11), CD28 (clone 37.51), and Mouse IL-2 Recombinant Protein (purple histogram). After stimulation, cells were stained with CD8 (clone 53-6.7) and CD25 (clone PC61.5). Cells in the CD8+ gate were used for analysis. {TM}

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

	For CD25 Monoclonal Antibody (PC61.5), PerCP-Cyanine5.5, eBioscience™
33 Flow Cytometry Refe	
Species / Dilution	Summary
	45-0251 was used in Flow cytometry/Cell sorting to define a pivotal role for CCR4 in the recruitment of T and mononuclear phagocyte cells to inflamed kidneys of lupus-prone mice.
Mouse / Not Cited	Journal of immunology (Baltimore, Md. : 1950) (2014; 192: 886) "CCR1 inhibition ameliorates the progression of lupus nephritis in NZB/W mice." Author(s):Bignon A,Gaudin F,Hémon P,Tharinger H,Mayol K,Walzer T,Loetscher P,Peuchmaur M,Berrebi D,Balabanian K PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1300123
Mouse / Not Cited	45-0251-82 was used in Flow cytometry/Cell sorting to suggest that P140 belongs to a new family of non-immunosuppressive immunoregulators that do not correct T and B cell abnormalities but rather contribute to the clearance of deleterious T and B cells.
	Frontiers in immunology (2022; 13:) "P140 Peptide Leads to Clearance of Autoreactive Lymphocytes and Normalizes Immune Response in Lupus-Prone Mice." Author(s):Schall N,Talamini L,Wilhelm M,Jouvin-Marche E,Muller S PubMed Article URL:http://dx.doi.org/10.3389/fimmu.2022.904669
Mouse / Not Cited	45-0251 was used in Flow cytometry/Cell sorting to investigate the roles for maniac fringe (MFNG) and radical fringe (RFNG) in T cell development, RFNG in B cell development, and Fringes in T and B cell activation, showing that they promote T and B cell development.
	Journal of immunology (Baltimore, Md. : 1950) (2016; 196: 232) "Lunatic, Manic, and Radical Fringe Each Promote T and B Cell Development." Author(s):Song Y,Kumar V,Wei HX,Qiu J,Stanley P PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1402421
Mouse / Not Cited	45-0251 was used in Flow cytometry/Cell sorting to investigate the functional requirement for CD28 during peripheral regulatory T cell post thymic selection.
	Immunology and cell biology (2015; 93: 417) "Promiscuous Foxp3-cre activity reveals a differential requirement for CD28 in Foxp3 and Foxp3 T cells." Author(s):Franckaert D,Dooley J,Roos E,Floess S,Huehn J,Luche H,Fehling HJ,Liston A,Linterman MA,Schlenner SM PubMed Article URL:http://dx.doi.org/10.1038/icb.2014.108
Mouse / Not Cited	45-0251 was used in Flow cytometry/Cell sorting to reveal intestinal Th2 priming is initiated by an autocrine/paracrine acting CD4(+) Th cell-intrinsic IL-4 program that is controlled by DC OX40L.
	Mucosal immunology (2014; 7: 1395) "T helper cell IL-4 drives intestinal Th2 priming to oral peanut antigen, under the control of OX40L and independent of innate-like lymphocytes." Author(s):Chu DK,Mohammed-Ali Z,Jiménez-Saiz R,Walker TD,Goncharova S,Llop-Guevara A,Kong J,Gordon ME,Barra NG,Gillgrass AE,Van Seggelen H,Khan WI,Ashkar AA,Bramson JL,Humbles AA,Kolbeck R,Waserman S,Jordana M PubMed Article URL:http://dx.doi.org/10.1038/mi.2014.29
Human / Not Cited	45-0251 was used in Flow cytometry/Cell sorting to suggest that Treg and Th17 cells as well as their cytokines may be involved in the pathogenesis of acute bronchitis.
	Experimental and therapeutic medicine (2017; 14: 3846) "Changes of Treg and Th17 cells as well as cytokines in children with acute bronchitis." Author(s):Tu Z,Xue H,Chen W,Cao L,Zhang W PubMed Article URL:http://dx.doi.org/10.3892/etm.2017.4992
Mouse / Not Cited	45-0251 was used in Flow cytometry/Cell sorting to investigate the therapeutic potential and immunological mechanisms of Schistosoma mansoni soluble worm protein in an adoptive T cell transfer mouse model of chronic colitis.
	PloS one (2015; 9:) "Worm proteins of Schistosoma mansoni reduce the severity of experimental chronic colitis in mice by suppressing colonic proinflammatory immune responses." Author(s):Heylen M,Ruyssers NE,De Man JG,Timmermans JP,Pelckmans PA,Moreels TG,De Winter BY PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0110002
	45-0251 was used in Flow cytometry/Cell sorting to assessed the impact of azacytidine on cGVHD in a murine model of sclerodermic cGVHD.
Mouse / Not Cited	Journal of hematology & oncology (2016; 9:) "Azacytidine mitigates experimental sclerodermic chronic graft-versus-host disease." Author(s):Fransolet G,Ehx G,Somja J,Delens L,Hannon M,Muller J,Dubois S,Drion P,Caers J,Humblet-Baron S,Delvenne P,Beguin Y,Conteduca G,Baron F PubMed Article URL:http://dx.doi.org/10.1186/s13045-016-0281-2

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation in the Buyer. Any model or sample furnished to Buyer is merely illustrated of the general type and quality of goods and does not represent that any Product will conclude out model or sample furnished to Buyer is merely illustrated of the general type and quality of goods and does not represent that any Product will confirm the sample for the general type and quality of goods and does not not provide and considerable to the general type and quality of goods and does not not provide any of the product will confirm the sample for the goods and does not not make a supplementation of the product will confirm the product in the product in the product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer and product in the product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer and product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer any model or sample furnished to be used to be a subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer and the product of th

	45-0251 was used in Flow cytometry/Cell sorting to explore the regulatory processes maintaining a tolerogenic attitude towards enteric commensal bacteria.
Mouse / Not Cited	Immunity (2010; 33: 791) "T regulatory cells maintain intestinal homeostasis by suppressing T cells." Author(s):Park SG,Mathur R,Long M,Hosh N,Hao L,Hayden MS,Ghosh S PubMed Article URL:http://dx.doi.org/10.1016/j.immuni.2010.10.014
	45-0251 was used in Flow cytometry/Cell sorting to establish the role of STAT4 in the regulation of cytokine production during experimental autoimmune encephalomyelitis pathogenesis.
Mouse / Not Cited	Journal of neuroinflammation (2015; 12:) "STAT4 controls GM-CSF production by both Th1 and Th17 cells during EAE." Author(s):McWilliams IL,Rajbhandari R,Nozell S,Benveniste E,Harrington LE PubMed Article URL:http://dx.doi.org/10.1186/s12974-015-0351-3
Mouse / Not Cited	45-0251-82 was used in Flow Cytometry to investigate the immunomodulatory response of different doses and dose-rates of irradiation in ApoE-/- mice.
	Dose-response: a publication of International Hormesis Society (2021; 19:) "Exposure to Low to Moderate Doses of Ionizing Radiation Induces A Reduction of Pro-Inflammatory Ly6chigh Monocytes and a U-Curved Response of T Cells in APOE -/- Mice." Author(s):Rey N,Ebrahimian T,Gloaguen C,Kereselidze D,Magneron V,Bontemps CA,Demarquay C,Olsson G,Haghdoost S,Lehoux S,Ebrahimian TG PubMed Article URL:http://dx.doi.org/10.1177/15593258211016237
Mouse / Not Cited	45-0251 was used in Flow cytometry/Cell sorting to investigate the role of MDSCs in IBD, showing that exosomes released by granulocytic MDSCs attenuate DSS-induced colitis in mice.
	Oncotarget (2016; 7: 15356) "Exosomes released by granulocytic myeloid-derived suppressor cells attenuate DSS-induced colitis in mice." Author(s):Wang Y,Tian J,Tang X,Rui K,Tian X,Ma J,Ma B,Xu H,Lu L,Wang S PubMed Article URL:http://dx.doi.org/10.18632/oncotarget.7324
Mouse / Not Cited	45-0251-82 was used in Flow cytometry/Cell sorting to support the use of alum as adjuvant to optimise the efficacy of antigen-specific immunotherapy in future trials.
	Frontiers in endocrinology (2022; 13:) "Preventing type 1 diabetes in late-stage pre-diabetic NOD mice with insulin: A central role for alum as adjuvant." Author(s):Martens PJ,Ellis D,Bruggeman Y,Viaene M,Laureys J,Teyton L,Mathieu C,Gysemans C PubMed Article URL:http://dx.doi.org/10.3389/fendo.2022.1023264
Mouse / Not Cited	45-0251-82 was used in Flow Cytometry to demonstrate the role of mesenchymal stem and stromal cell and macrophage cross-talk in post-injury tissue homeostasis in mice.
	Cell reports (2020; 30: 3806) "Mesenchymal Stem and Stromal Cells Harness Macrophage-Derived Amphiregulin to Maintain Tissue Homeostasis." Author(s):Ko JH,Kim HJ,Jeong HJ,Lee HJ,Oh JY PubMed Article URL:http://dx.doi.org/10.1016/j.celrep.2020.02.062
	45-0251 was used in Flow cytometry/Cell sorting to determine the impact of anti-viral vaccination on Treg homeostasis.
Mouse / Not Cited	PloS one (2017; 12:) "Regulatory T cell frequencies and phenotypes following anti-viral vaccination." Author(s):de Wolf ACMT,van Aalst S,Ludwig IS,Bodinham CL,Lewis DJ,van der Zee R,van Eden W,Broere F PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0179942
Mouse / Not Cited	45-0251 was used in Flow cytometry/Cell sorting to investigate the effects of IL-2R on the sensitivity of primary mouse T lymphocytes to cytokines that signal through receptors that have the common chain.
	Science signaling (2013; 6:) "Cell-to-cell variability analysis dissects the plasticity of signaling of common chain cytokines in T cells." Author(s):Cotari JW,Voisinne G,Dar OE,Karabacak V,Altan-Bonnet G PubMed Article URL:http://dx.doi.org/10.1126/scisignal.2003240
	45-0251 was used in Flow cytometry/Cell sorting to explore the utility of ablative fractional photothermolysis in treating oncological indications, including induction of local tumour regression and inducing anti-tumour immunity.
Mouse / Not Cited	PloS one (2017; 12:) "Fractional laser exposure induces neutrophil infiltration (N1 phenotype) into the tumor and stimulates systemic anti-tumor immune response." Author(s):Kawakubo M,Demehri S,Manstein D PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0184852

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation in the Buyer. Any model or sample furnished to Buyer is merely illustrated of the general type and quality of goods and does not represent that any Product will conclude out model or sample furnished to Buyer is merely illustrated of the general type and quality of goods and does not represent that any Product will confirm the sample for the general type and quality of goods and does not not provide and considerable to the general type and quality of goods and does not not provide any of the product will confirm the sample for the goods and does not not make a supplementation of the product will confirm the product in the product in the product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer and product in the product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer and product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer any model or sample furnished to be used to be a subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer and the product of th

	45-0251 was used in Flow cytometry/Cell sorting to identify host factors involved in HSV-1 and herpes simplex encephalitis susceptibility in an in vivo HSV-1 infectious model.
Mouse / Not Cited	PLoS pathogens (2013; 9:) "Genome-wide mouse mutagenesis reveals CD45-mediated T cell function as critical in protective immunity to HSV-1." Author(s):Caignard G,Leiva-Torres GA,Leney-Greene M,Charbonneau B,Dumaine A,Fodil-Cornu N,Pyzik M,Cingolani P, Schwartzentruber J,Dupaul-Chicoine J,Guo H,Saleh M,Veillette A,Lathrop M,Blanchette M,Majewski J,Pearson A,Vidal
	SM PubMed Article URL:http://dx.doi.org/10.1371/journal.ppat.1003637
	45-0251 was used in Flow cytometry/Cell sorting to investigate why CD4(+)CD25(+)Foxp3(+) Tregs allow organ-specific autoimmunity, showing that polyclonal Tregs suppressed Th17 cell formation and prevented arthritis development, but clonotypic Tregs did not, indicating that diverse TCR specificities are required.
Mouse / Not Cited	Journal of immunology (Baltimore, Md. : 1950) (2012; 188: 4171) "Requirement for diverse TCR specificities determines regulatory T cell activity in a mouse model of autoimmune arthritis." Author(s):Oh S,Aitken M,Simons DM,Basehoar A,Garcia V,Kropf E,Caton AJ PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1103598
Mouse / Not Cited	45-0251 was used in Flow cytometry/Cell sorting to study how allergic patterns of lung inflammation are mediated as a host response to Cryptococcus neoformans infection.
	Journal of immunology (Baltimore, Md. : 1950) (2013; 191: 2503) "IL-33 signaling regulates innate and adaptive immunity to Cryptococcus neoformans." Author(s):Flaczyk A,Duerr CU,Shourian M,Lafferty EI,Fritz JH,Qureshi ST PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1300426
Mouse / Not Cited	45-0251 was used in Flow cytometry/Cell sorting to study the formation of murine Butyrophilin-like 1 and Btnl6 hetermomeric complexes in small intestinal epithelial cells and promote proliferation of local T lymphocytes.
	Frontiers in immunology (2016; 7:) "Murine Butyrophilin-Like 1 and Btnl6 Form Heteromeric Complexes in Small Intestinal Epithelial Cells and Promote Proliferation of Local T Lymphocytes." Author(s):Lebrero-Fernández C,Bergström JH,Pelaseyed T,Bas-Forsberg A PubMed Article URL:http://dx.doi.org/10.3389/fimmu.2016.00001
Mouse / Not Cited	45-0251 was used in Flow cytometry/Cell sorting to assess the pyruvate dehydrogenase complex/pyruvate dehydrogenase kinase 1 axis as a druggable mitochondrial target for promoting immunometabolic and organ homeostasis during sepsis.
	JCI insight (2018; 3:) "Pyruvate dehydrogenase complex stimulation promotes immunometabolic homeostasis and sepsis survival." Author(s):McCall CE,Zabalawi M,Liu T,Martin A,Long DL,Buechler NL,Arts RJW,Netea M,Yoza BK,Stacpoole PW, Vachharajani V PubMed Article URL:http://dx.doi.org/10.1172/jci.insight.99292
Mouse / 1:100	45-0251 was used in Flow cytometry/Cell sorting to study how tumour eradication can be controlled by interdependent IL-7 and IFN- signalling in T-cells.
	Nature communications (2016; 7:) "Interdependent IL-7 and IFN- signalling in T-cell controls tumour eradication by combined -CTLA-4+-PD-1 therapy." Author(s):Shi LZ,Fu T,Guan B,Chen J,Blando JM,Allison JP,Xiong L,Subudhi SK,Gao J,Sharma P PubMed Article URL:http://dx.doi.org/10.1038/ncomms12335
Mouse / Not Cited	45-0251-82 was used in Flow Cytometry to investigate the effects of fascin blockade in anti-tumor immune responses in syngeneic mouse models of various cancers.
	Cell reports (2021; 35:) "Fascin inhibitor increases intratumoral dendritic cell activation and anti-cancer immunity." Author(s):Wang Y,Song M,Liu M,Zhang G,Zhang X,Li MO,Ma X,Zhang JJ,Huang XY PubMed Article URL:http://dx.doi.org/10.1016/j.celrep.2021.108948
	45-0251 was used in Flow cytometry/Cell sorting to suggest that Tal-1 expression is needed to express Runx1 in the mesoderm.
Mouse / Not Cited	PloS one (2014; 8:) "Ectopic Runx1 expression rescues Tal-1-deficiency in the generation of primitive and definitive hematopoiesis." Author(s):Tornack J,Seiler K,Grützkau A,Grün JR,Onodera M,Melchers F,Tsuneto M PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0070116

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation in the Buyer. Any model or sample furnished to Buyer is merely illustrated of the general type and quality of goods and does not represent that any Product will conclude out model or sample furnished to Buyer is merely illustrated of the general type and quality of goods and does not represent that any Product will confirm the sample for the general type and quality of goods and does not not provide and considerable to the general type and quality of goods and does not not provide any of the product will confirm the sample for the goods and does not not make a supplementation of the product will confirm the product in the product in the product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer and product in the product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer and product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer any model or sample furnished to be used to be a subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer and the product of th

2 Functional Assay Re	ferences
Mouse / 1:1000	eLife (2021; 10:) "LMO2 is essential to maintain the ability of progenitors to differentiate into T-cell lineage in mice." Author(s):Hirano KI,Hosokawa H,Koizumi M,Endo Y,Yahata T,Ando K,Hozumi K PubMed Article URL:http://dx.doi.org/10.7554/eLife.68227
Mouse / Not Cited	45-0251-82 was used in Flow Cytometry to highlight LMO2 as a crucial player in the survival and maintenance of T-lineage potential in T-cell progenitors via the regulation of the expression of Bcl11a and Tcf7.
	Frontiers in immunology (2016; 7:) "Generation of the First TCR Transgenic Mouse with CD4(+) T Cells Recognizing an Anti-inflammatory Regulatory T Cell-Inducing Hsp70 Peptide." Author(s):Jansen MA,van Herwijnen MJ,van Kooten PJ,Hoek A,van der Zee R,van Eden W,Broere F PubMed Article URL:http://dx.doi.org/10.3389/fimmu.2016.00090
Mouse / Not Cited	45-0251 was used in Flow cytometry/Cell sorting to generate a novel mouse model to allow the study of primary antigenspecific T cells.
	Mucosal immunology (2016; 9: 1407) "IL-4-producing ILC2s are required for the differentiation of T _H 2 cells following Heligmosomoides polygyrus infection." Author(s):Pelly VS,Kannan Y,Coomes SM,Entwistle LJ,Rückerl D,Seddon B,MacDonald AS,McKenzie A,Wilson MS PubMed Article URL:http://dx.doi.org/10.1038/mi.2016.4
Mouse / Not Cited	45-0251 was used in Flow cytometry/Cell sorting to highlight a previously unrecognised and important role for ILC2-derived IL-4 for TH2 differentiation in a natural TH2-dependent model of human helminthiasis.
	Journal of clinical & cellular immunology (2020; 6: 1) "ER <i></i> and ER <i></i> Differentially Regulate NKT and V <i></i> egulatory Cell Response in Coxsackievirus B3 Infected Mice." Author(s):Huber S PubMed Article URL:http://dx.doi.org/10.4172/2155-9899.1000372
Mouse / Not Cited	45-0251 was used in Flow cytometry/Cell sorting to determine the relative role and mechanism of action of estrogen receptor alpha and beta in myocarditis susceptibility.
	The Journal of experimental medicine (2018; 215: 1803) "Effector CD4 T cells with progenitor potential mediate chronic intestinal inflammation." Author(s):Shin B,Kress RL,Kramer PA,Darley-Usmar VM,Bellis SL,Harrington LE PubMed Article URL:http://dx.doi.org/10.1084/jem.20172335
	45-0251 was used in Flow cytometry/Cell sorting to indicate that the chronicity of T cell-mediated inflammation is perpetuated by specific effector CD4 T cells with stem-like properties.
Mouse / Not Cited	Immunity (2020; 53: 1182) "An Integrated Epigenomic and Transcriptomic Map of Mouse and Human T Cell Development." Author(s):Chopp LB,Gopalan V,Ciucci T,Ruchinskas A,Rae Z,Lagarde M,Gao Y,Li C,Bosticardo M,Pala F,Livak F,Kelly MC,Hannenhalli S,Bosselut R PubMed Article URL:http://dx.doi.org/10.1016/j.immuni.2020.10.024
	45-0251-82 was used in Flow Cytometry to identify mouse and human thymocyte developmental trajectories.
Mouse / Not Cited Mouse / Not Cited	Nature immunology (2015; 16: 286) "IL-1 signaling modulates activation of STAT transcription factors to antagonize retinoic acid signaling and control the TH17 cell-iTreg cell balance." Author(s):Basu R,Whitley SK,Bhaumik S,Zindl CL,Schoeb TR,Benveniste EN,Pear WS,Hatton RD,Weaver CT PubMed Article URL:http://dx.doi.org/10.1038/ni.3099
	45-0251 was used in Flow cytometry/Cell sorting to assess the ability of IL-1 to override retinoic acid-mediated expression of the transcription factor Foxp3 and induce protective TH17 cell responses.
	Author(s):Gujar S,Dielschneider R,Clements D,Helson E,Shmulevitz M,Marcato P,Pan D,Pan LZ,Ahn DG,Alawadhi A,Lee PW PubMed Article URL:http://dx.doi.org/10.1038/mt.2012.228
	Molecular therapy: the journal of the American Society of Gene Therapy (2013; 21: 338) "Multifaceted therapeutic targeting of ovarian peritoneal carcinomatosis through virus-induced immunomodulation."
	45-0251 was used in Flow cytometry/Cell sorting to develop a virus-based therapy that suppresses immunomodulation and targets ovarian peritoneal carcinomatosis.

Summary

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation in the Buyer. Any model or sample furnished to Buyer is merely illustrated of the general type and quality of goods and does not represent that any Product will conclude out model or sample furnished to Buyer is merely illustrated of the general type and quality of goods and does not represent that any Product will confirm the sample for the general type and quality of goods and does not not provide and considerable to the general type and quality of goods and does not not provide any of the product will confirm the sample for the goods and does not not make a supplementation of the product will confirm the product in the product in the product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer and product in the product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer and product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer any model or sample furnished to be used to be a subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer and the product of th

NO OTHER WARRANTIES, EXPRESS OR IMPLED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT, BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DIXING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACE OR REFUND FOR THE RON-CONFORMING PRODUCTS, AT SELLER'S SOLE OPTION, THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FALLT OR NEGLEGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DOES AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

Species / Dilution

Not Applicable / Not Cited	Cancer research (2007; 67: 5929) "Combination of tumor site-located CTL-associated antigen-4 blockade and systemic regulatory T-cell depletion induces tumor-destructive immune responses." Author(s):Tuve S,Chen BM,Liu Y,Cheng TL,Touré P,Sow PS,Feng Q,Kiviat N,Strauss R,Ni S,Li ZY,Roffler SR,Lieber A PubMed Article URL:http://dx.doi.org/10.1158/0008-5472.CAN-06-4296	
Cancer research (2007; 67: 4346) Not Applicable / Not Cited "Listeria monocytogenes promotes tumor growth via tumor cell toll-like receptor 2 signaling." Author(s):Huang B,Zhao J,Shen S,Li H,He KL,Shen GX,Mayer L,Unkeless J,Li D,Yuan Y,Zhang GM,Xiong H,PubMed Article URL:http://dx.doi.org/10.1158/0008-5472.CAN-06-4067		

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation in, is warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample turnished to Buyer is memely illustrative of the general type and quality of goods and does not represent that any product will combus model or sample turnished to Buyer is memely illustrative of the general type and quality of goods and does not represent that any product will combus models or sample turnished to Buyer is memely illustrative of the general type and quality of goods and does not represent that any product will combus members.