



# IL-17A Monoclonal Antibody (eBio17B7), PE-Cyanine7, eBioscience™

**Catalog Number** 

25-7177-82

Product data sheet

Details		Species Reactivity		
Size	100 μg	Species reactivity	Mouse, Rat	
Host/Isotope	Rat / IgG2a, kappa	Published species	Rat, Mouse, Not Applicable	
Class	Monoclonal	Tested Applications	Dilution *	
Туре	Antibody	Flow Cytometry (Flow)	0.5 µg/test	
Clone	eBio17B7	Published Applications		
Conjugate	PE-Cyanine7	Flow Cytometry (Flow)	See 26 publications below	
Form	Liquid	Western Blot (WB)	See 1 publications below	
Concentration	0.2 mg/mL	Miscellaneous PubMed (Misc)	See 1 publications below	
Purification	Affinity chromatography	Functional Assay (FN)	See 1 publications below	
Storage buffer	PBS, pH 7.2	Immunohistochemistry (Paraffin) (IHC (P))	See 1 publications below	
Contains	0.09% sodium azide	"	Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own	
Storage Conditions	4° C, store in dark, DO NOT FREEZE!	Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their or experiment using appropriate negative and positive controls.		

### Product specific information

Description: The eBio17B7 antibody reacts with mouse and rat IL-17A with no recognition of IL-17F. Interleukin-17A (IL-17A) is a CD4+ T cell-derived cytokine that promotes inflammatory responses in cell lines and is elevated in rheumatoid arthritis, asthma, multiple sclerosis, psoriasis, and transplant rejection. The cDNA encoding human IL-17A was isolated from a library of CD4+ T cells; the encoded protein exhibits 72 percent amino acid identity with HVS13, an open reading frame from a T lymphotropic Herpesvirus saimiri, and 63 percent with mouse CTLA-8 (cytotoxic T-lymphocyte associated antigen-8). Human IL-17A exists as glycosylated 20-30 kD homodimers. High levels of IL-17A homodimer are produced by activated peripheral blood CD4+ T-cells. IL-17A enhances expression of the intracellular adhesion molecule-1 (ICAM-1) in human fibroblasts. Human IL-17A also stimulates epithelial, endothelial, or fibroblastic cells to secrete IL-6, IL-8, G-CSF, and PGE2. In the presence of human IL-17A, fibroblasts can sustain the proliferation of CD34+ hematopoietic progenitors and induce maturation into neutrophils. Mouse, rat, and human IL-17A can induce IL-6 secretion in mouse stromal cells, indicating that all homologs can recognize the mouse IL-17A receptor. IL-23-dependent, IL-17A-producing CD4+ T cells (Th-17 cells) have been identified as a unique subset of Th cells that develops along a pathway that is distinct from the Th1- and Th2- cell differentiation pathways. The hallmark effector molecules of Th1 and Th2 cells, e.g., IFN gamma and IL-4, have each been found to negatively regulate the generation of these Th-17 cells. Applications Reported: This eBio17B7 antibody has been reported for use intracellular satining followed by flow cytometric analysis. Applications Tested: This eBio17B7 antibody has been tested by intracellular staining and flow cytometric analysis of restimulated, Th17polarized mouse splenocytes using the Intracellular Fixation and Permeabilization Buffer Set (cat. 88-8824) and protocol. This can be used at less than or equal to 0.5 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<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest. Staining has been successfully done using the Foxp3 buffer system (cat 00-5523) Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light. Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically. Excitation: 488-561 nm; Emission: 775 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser. Filtration: 0.2 µm post-manufacturing filtered.

### Background/Target Information

Interleukin-17A (IL-17A, CTLA-8) is a CD4+ T cell-derived cytokine that promotes inflammatory responses in cell lines and is elevated in rheumatoid arthritis, asthma, multiple sclerosis, psoriasis, and transplant rejection. IL-17A is a 32 kDa long, disulfide-linked homodimer consisting of 136 amino acids that is a member of a six-species family of proteins (IL-17A-17F) and signals through the IL-17 receptor (IL-17R/CDw217). High levels of IL-17A homodimer are produced by activated peripheral blood CD4+ T-cells, and IL-17A also enhances expression of the intracellular adhesion molecule-1 (ICAM-1) in human fibroblasts. In particular, human IL-17A also stimulates epithelial, endothelial, or fibroblastic cells to secrete IL-6, IL-8, G-CSF, and PGE2. In the presence of human IL-17A, fibroblasts can sustain the proliferation of CD34+ hematopoietic progenitors and induce maturation into neutrophils. Mouse, rat, and human IL-17A can induce IL-6 secretion in mouse stromal cells, indicating that all homologs can recognize the mouse receptor. IL-17A regulates the activities of NF-kappa B and mitogen-activated protein kinases, stimulates the expression of IL-6 and cyclooxygenase-2 (PTGS2/COX-2), and enhances the production of nitric oxide (NO).

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 insents ("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.

NO OTHER WARRANTIES, EXPRESS OR IMPLED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BLYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACE OR REFUND FOR THE NON-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, FAULT OR NEGLIGIBLENCE OF OR BY BUYER, (III) USE or THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE 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, or vitro diagnostic uses, or any type of consumption by or application to human or animals.



## Product Images For IL-17A Monoclonal Antibody (eBio17B7), PE-Cyanine7, eBioscience™

# CD4 FLC CO7 I

### IL-17A Antibody (25-7177-82) in Flow

Intracellular staining of 10-day Th17-polarized mouse splenocytes either unstimulated (left) or stimulated with Cell Stimulation Cocktail (plus protein transport inhibitors) (500X) (Product # 00-4975-03) (right) with Anti-Mouse CD4 FITC (Product # 11-0042-82) and 0.25 µg of Anti-Mouse/Rat IL-17A PE-Cyanine7 using the Intracellular Fixation & Permeabilization Buffer Set (Product # 88-8824-00) and protocol.

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 usuad 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 furnished to Buyer is merely illustrative of the general type and quality of goods and doss not represent that are my Product will continue the Durby and quality of goods and doss not represent that are my product will continue the Durby and quality of goods and doss not represent that are my product will continue the Durby and quality of goods and doss not represent that are my product will continue the Durby and quality of goods and doss not represent that are my product will continue the Durby and quality of goods and doss not represent that are my product will continue the Durby and quality of goods and doss not not present that are my product will continue the Durby and product and pr

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 DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACE OR REFUND FOR THE NON-CONFORMING PRODUCTS) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR REFUND FOR REFUND FOR THE NON-CONFORMING PRODUCTS) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR REFOLDETS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FALLY OR NEGLIGIENCE OF OR BY BUYER, (III) USE of THE PRODUCTS. In A MANNER FOR WHICH THEY WERE NOT DESIDED, (IV) IMPROPER STORAGE 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, or vitro or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

	IL-17A Monoclonal Antibody (eBio17B7), PE-Cyanine7, eBioscience™	
26 Flow Cytometry Referen		
Species / Dilution  Not Applicable / Not Cited	Summary  Journal of immunology (Baltimore, Md.: 1950) (2009; 183: 298)  "Early life exposure to lipopolysaccharide suppresses experimental autoimmune encephalomyelitis by promoting tolerogenic dendritic cells and regulatory T cells."  Author(s):Ellestad KK,Tsutsui S,Noorbakhsh F,Warren KG,Yong VW,Pittman QJ,Power C PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.0803576	
	25-7177 was used in Flow cytometry/Cell sorting to elucidate the developmental progression and interrelationship of central and effector regulatory T cell subsets.	
Mouse / Not Cited	Journal of immunology (Baltimore, Md. : 1950) ( 2016; 196: 3665)  "Developmental Progression and Interrelationship of Central and Effector Regulatory T Cell Subsets."  Author(s):Toomer KH,Yuan X,Yang J,Dee MJ,Yu A,Malek TR  PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1500595	
	25-7177-82 was used in flow cytometry experiments to investigate intestinal inflammation in children with autism spectrum disorders in response to maternal gut bacteria.	
Mouse / Not Cited	Immunity (2022; 55: 145)  "Maternal gut bacteria drive intestinal inflammation in offspring with neurodevelopmental disorders by altering the chromatin landscape of CD4 <sup>+</sup> T cells."  Author(s):Kim E,Paik D,Ramirez RN,Biggs DG,Park Y,Kwon HK,Choi GB,Huh JR  PubMed Article URL:http://dx.doi.org/10.1016/j.immuni.2021.11.005	
	25-7177 was used in Flow cytometry/Cell sorting to investigate the time course of IL-4 production and its innate cellular source in mice infected intranasally with Cryptococcus neoformans.	
Mouse / Not Cited	The American journal of pathology (2011; 179: 733)  "Eosinophils contribute to IL-4 production and shape the T-helper cytokine profile and inflammatory response in pulmonary cryptococcosis."  Author(s):Piehler D,Stenzel W,Grahnert A,Held J,Richter L,Köhler G,Richter T,Eschke M,Alber G,Müller U  PubMed Article URL:http://dx.doi.org/10.1016/j.ajpath.2011.04.025	
	25-7177-82 was used in Flow Cytometry to suggest that inhibiting glycolysis by targeting Gpi1 could be an effective therapeutic strategy with minimum toxicity for Th17-mediated autoimmune diseases, and, more generally, that metabolic redundancies can be exploited for selective targeting of disease processes.	
Mouse / Not Cited	Cell (2020; 182: 641)  "Niche-Selective Inhibition of Pathogenic Th17 Cells by Targeting Metabolic Redundancy."  Author(s):Wu L,Hollinshead KER,Hao Y,Au C,Kroehling L,Ng C,Lin WY,Li D,Silva HM,Shin J,Lafaille JJ,Possemato R, Pacold ME,Papagiannakopoulos T,Kimmelman AC,Satija R,Littman DR  PubMed Article URL:http://dx.doi.org/10.1016/j.cell.2020.06.014	
	25-7177-82 was used in Flow Cytometry to examine the impact of IL-1 signaling, a key regulator of the IL-17 pathway, in different cell types within the CRC microenvironment.	
Mouse / Not Cited	Immunity (2019; 50: 166)  "Cell-Type-Specific Responses to Interleukin-1 Control Microbial Invasion and Tumor-Elicited Inflammation in Colorectal Cancer."  Author(s):Dmitrieva-Posocco O,Dzutsev A,Posocco DF,Hou V,Yuan W,Thovarai V,Mufazalov IA,Gunzer M,Shilovskiy IP, Khaitov MR,Trinchieri G,Waisman A,Grivennikov SI PubMed Article URL:http://dx.doi.org/10.1016/j.immuni.2018.11.015	
	25-7177 was used in Flow cytometry/Cell sorting to identify a regulatory subpopulation of innate lymphoid cells that exists in the gut, and harbour a unique gene identity.	
Mouse / Not Cited	Cell (2017; 171: 201)  "Regulatory Innate Lymphoid Cells Control Innate Intestinal Inflammation."  Author(s):Wang S,Xia P,Chen Y,Qu Y,Xiong Z,Ye B,Du Y,Tian Y,Yin Z,Xu Z,Fan Z  PubMed Article URL:http://dx.doi.org/10.1016/j.cell.2017.07.027	
	25-7177 was used in Flow cytometry/Cell sorting to uncover epithelial-cell-derived Pla2g1b as an essential mediator of helminth killing.	
Mouse / Not Cited	Cell host & microbe (2017; 22: 484)  "Epithelial-Cell-Derived Phospholipase A <sub>2</sub> Group 1B Is an Endogenous Anthelmintic."  Author(s):Entwistle LJ,Pelly VS,Coomes SM,Kannan Y,Perez-Lloret J,Czieso S,Silva Dos Santos M,MacRae JI,Collinson L,Sesay A,Nikolov N,Metidji A,Helmby H,Hui DY,Wilson MS  PubMed Article URL:http://dx.doi.org/10.1016/j.chom.2017.09.006	

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 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 or 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 and 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 be producted to normal, proper and intended usage. The subject to the product of the product

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.

	25-7177-82 was used in Flow cytometry/Cell sorting to demonstrate a role for IEC-derived MHC class II in constraining microbiota composition and inducing tolerogenic responses against it.
Mouse / Not Cited	Cell reports (2021; 37:)  "Epithelial-myeloid exchange of MHC class II constrains immunity and microbiota composition."  Author(s):Stephens WZ,Kubinak JL,Ghazaryan A,Bauer KM,Bell R,Buhrke K,Chiaro TR,Weis AM,Tang WW,Monts JK, Soto R,Ekiz HA,O'Connell RM,Round JL  PubMed Article URL:http://dx.doi.org/10.1016/j.celrep.2021.109916
Mouse / Not Cited	25-7177-82 was used in Flow Cytometry to identify an essential role for adipocyte lipolysis in regulating inflammation and repair after injury in skin.
	Cell stem cell (2020; 26: 880)  "Dermal Adipocyte Lipolysis and Myofibroblast Conversion Are Required for Efficient Skin Repair."  Author(s):Shook BA,Wasko RR,Mano O,Rutenberg-Schoenberg M,Rudolph MC,Zirak B,Rivera-Gonzalez GC,López-Giráldez F,Zarini S,Rezza A,Clark DA,Rendl M,Rosenblum MD,Gerstein MB,Horsley V  PubMed Article URL:http://dx.doi.org/10.1016/j.stem.2020.03.013
Mouse / Not Cited	25-7177 was used in Flow cytometry/Cell sorting to investigate the contribution of B cells to antigen presentation and pathogenic T cell activation in the multiple sclerosis model experimental autoimmune encephalomyelitis.
	The Journal of experimental medicine (2013; 210: 2921)  "MHC class II-dependent B cell APC function is required for induction of CNS autoimmunity independent of myelin-specific antibodies."  Author(s):Molnarfi N,Schulze-Topphoff U,Weber MS,Patarroyo JC,Prod'homme T,Varrin-Doyer M,Shetty A,Linington C, Slavin AJ,Hidalgo J,Jenne DE,Wekerle H,Sobel RA,Bernard CC,Shlomchik MJ,Zamvil SS PubMed Article URL:http://dx.doi.org/10.1084/jem.20130699
Mouse / Not Cited	25-7177-82 was used in Flow Cytometry to reveal that acetyl-CoA carboxylase 1-dependent fatty acid synthesis is a crucial mechanism in T cells, but not dendritic cells or macrophages, to fight against mycobacterial infection.
	Frontiers in immunology ( 2019; 9: )  " <i>De Novo</i> Fatty Acid Synthesis During Mycobacterial Infection Is a Prerequisite for the Function of Highly Proliferative T Cells, But Not for Dendritic Cells or Macrophages."  Author(s):Stüve P,Minarrieta L,Erdmann H,Arnold-Schrauf C,Swallow M,Guderian M,Krull F,Hölscher A,Ghorbani P, Behrends J,Abraham WR,Hölscher C,Sparwasser TD,Berod L  PubMed Article URL:http://dx.doi.org/10.3389/fimmu.2018.00495
Mouse / Not Cited	25-7177 was used in Flow cytometry/Cell sorting to identify that pathogenic Th2 cells are an important direct target of IL-10 and an insight into IL-10 mediated regualation of allergic airway inflammation.
	Mucosal immunology (2017; 10: 150)  "CD4 <sup>+</sup> Th2 cells are directly regulated by IL-10 during allergic airway inflammation."  Author(s):Coomes SM,Kannan Y,Pelly VS,Entwistle LJ,Guidi R,Perez-Lloret J,Nikolov N,Müller W,Wilson MS PubMed Article URL:http://dx.doi.org/10.1038/mi.2016.47
Mouse / Not Cited	25-7177 was used in Flow cytometry/Cell sorting to study the role of extracellular Arginase I in inflammation and immunity.
	Journal of immunology (Baltimore, Md. : 1950) ( 2014; 193: 1717)  "Macrophage PTEN regulates expression and secretion of arginase I modulating innate and adaptive immune responses."  Author(s):Sahin E,Haubenwallner S,Kuttke M,Kollmann I,Halfmann A,Dohnal AM,Chen L,Cheng P,Hoesel B,Einwallner E, Brunner J,Kral JB,Schrottmaier WC,Thell K,Saferding V,Blüml S,Schabbauer G  PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1302167
Mouse / Not Cited	25-7177 was used in Flow cytometry/Cell sorting to find that T-cell-intrinsic expression of the oxygen-sensing prolyl-hydroxylase proteins is required to maintain local tolerance against innocuous antigens in the lung but powerfully licenses colonization by circulating tumor cells.
	Cell (2016; 166: 1117)  "Oxygen Sensing by T Cells Establishes an Immunologically Tolerant Metastatic Niche."  Author(s):Clever D,Roychoudhuri R,Constantinides MG,Askenase MH,Sukumar M,Klebanoff CA,Eil RL,Hickman HD,Yu Z, Pan JH,Palmer DC,Phan AT,Goulding J,Gattinoni L,Goldrath AW,Belkaid Y,Restifo NP PubMed Article URL:http://dx.doi.org/10.1016/j.cell.2016.07.032
	25-7177 was used in Flow cytometry/Cell sorting to study the role of regulatory T cells in hair follicles and hair follicle stem cell biology.
Mouse / Not Cited	Cell (2017; 169: 1119)  "Regulatory T Cells in Skin Facilitate Epithelial Stem Cell Differentiation."  Author(s):Ali N,Zirak B,Rodriguez RS,Pauli ML,Truong HA,Lai K,Ahn R,Corbin K,Lowe MM,Scharschmidt TC,Taravati K, Tan MR,Ricardo-Gonzalez RR,Nosbaum A,Bertolini M,Liao W,Nestle FO,Paus R,Cotsarelis G,Abbas AK,Rosenblum MD PubMed Article URL:http://dx.doi.org/10.1016/j.cell.2017.05.002

 $\label{thm:condition} For \, Research \, Use \, Only. \, \, Not \, for \, use \, in \, diagnostic \, procedures. \, Not \, for \, resale \, without \, express \, authorization.$ 

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 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 or 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 and 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 be producted to normal, proper and intended usage. The subject to the product of the product

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.

Mouse / Not Cited	25-7177 was used in Flow cytometry/Cell sorting to investigate the effects of hydroxychloroquine on hypertension, endothelial dysfunction, and renal injury in a mouse model of systemic lupus erythematosus.
	Hypertension (Dallas, Tex.: 1979) (2014; 64: 330)  "Chronic hydroxychloroquine improves endothelial dysfunction and protects kidney in a mouse model of systemic lupus erythematosus."  Author(s):Gómez-Guzmán M,Jiménez R,Romero M,Sánchez M,Zarzuelo MJ,Gómez-Morales M,O'Valle F,López-Farré AJ, Algieri F,Gálvez J,Pérez-Vizcaino F,Sabio JM,Duarte J  PubMed Article URL:http://dx.doi.org/10.1161/HYPERTENSIONAHA.114.03587
Mouse / Not Cited	25-7177 was used in Flow cytometry/Cell sorting to define the functions of Bcl6 in Treg cells, including Tfr cells, in the context of allergic airway inflammation.
	The Journal of allergy and clinical immunology (2020; 146: 1121)  "Bcl6 and Blimp1 reciprocally regulate ST2 <sup>+</sup> Treg-cell development in the context of allergic airway inflammation."  Author(s):Koh B,Ulrich BJ,Nelson AS,Panangipalli G,Kharwadkar R,Wu W,Xie MM,Fu Y,Turner MJ,Paczesny S,Janga SC, Dent AL,Kaplan MH PubMed Article URL:http://dx.doi.org/10.1016/j.jaci.2020.03.002
Mouse / Not Cited	25-7177 was used in Flow cytometry/Cell sorting to introduce the first evidence that PD-1 plays a critical role in Trichinella spiralis infection-attenuated collagen-induced arthritis in a mouse model by regulating the CD4+ T cell function, which may provide the new insights into the mechanisms of helminth-induced immunomodulation of host autoimmunity.
	Frontiers in immunology (2019; 9:) " <i>Trichinella spiralis</i> Infection Mitigates Collagen-Induced Arthritis <i>via</i> Programmed Death 1-Mediated Immunomodulation."  Author(s):Cheng Y,Zhu X,Wang X,Zhuang Q,Huyan X,Sun X,Huang J,Zhan B,Zhu X  PubMed Article URL:http://dx.doi.org/10.3389/fimmu.2018.01566
Mouse / Not Cited	25-7177 was used in Flow cytometry/Cell sorting to study the suppression of diabetes in NOD mice due to IL-17 and IFN-deficiency.
	Diabetologia (2013; 56: 1773) "Double deficiency in IL-17 and IFN- signalling significantly suppresses the development of diabetes in the NOD mouse."  Author(s):Kuriya G,Uchida T,Akazawa S,Kobayashi M,Nakamura K,Satoh T,Horie I,Kawasaki E,Yamasaki H,Yu L, lwakura Y,Sasaki H,Nagayama Y,Kawakami A,Abiru N PubMed Article URL:http://dx.doi.org/10.1007/s00125-013-2935-8
Mouse / Not Cited	25-7177-82 was used in Flow cytometry/Cell sorting to suggest a positive feedback loop wherein dysbiosis foments the accumulation of STING in intestinal myeloid cells, driving intestinal inflammation.
	Immunity (2021; 54: 1137) "Dysbiosis exacerbates colitis by promoting ubiquitination and accumulation of the innate immune adaptor STING in myeloid cells."  Author(s):Shmuel-Galia L,Humphries F,Lei X,Ceglia S,Wilson R,Jiang Z,Ketelut-Carneiro N,Foley SE,Pechhold S, Houghton J,Muneeruddin K,Shaffer SA,McCormick BA,Reboldi A,Ward D,Marshak-Rothstein A,Fitzgerald KA PubMed Article URL:http://dx.doi.org/10.1016/j.immuni.2021.05.008
Mouse / Not Cited	25-7177 was used in Flow cytometry/Cell sorting to study the mechanism relating complement activation to tumour progression in multiple immunocompetent orthotopic models of lung cancer.
	Cancer research (2018; 78: 143) "Complement Activation via a C3a Receptor Pathway Alters CD4 <sup>+</sup> T Lymphocytes and Mediates Lung Cancer Progression." Author(s):Kwak JW,Laskowski J,Li HY,McSharry MV,Sippel TR,Bullock BL,Johnson AM,Poczobutt JM,Neuwelt AJ, Malkoski SP,Weiser-Evans MC,Lambris JD,Clambey ET,Thurman JM,Nemenoff RA PubMed Article URL:http://dx.doi.org/10.1158/0008-5472.CAN-17-0240
Rat / Not Cited	25-7177 was used in Flow cytometry/Cell sorting to investigate the role of mTOR signalling in poststroke neuroinflammation, showing that inhibition modulates neuroinflammation and secondary injury via regulatory T cells.
	Journal of immunology (Baltimore, Md. : 1950) ( 2014; 192: 6009) "mTOR signaling inhibition modulates macrophage/microglia-mediated neuroinflammation and secondary injury via regulatory T cells after focal ischemia." Author(s):Xie L,Sun F,Wang J,Mao X,Xie L,Yang SH,Su DM,Simpkins JW,Greenberg DA,Jin K PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1303492
	25-7177-82 was used in Flow Cytometry to reveal that IL-27 contributes to autoimmunity in NOD mice through multiple mechanisms and provides substantial evidence to support its pathogenic role in human T1D.
Mouse / Not Cited	Cell reports (2019; 29: 3073)  "Interleukin-27 Is Essential for Type 1 Diabetes Development and Sjögren Syndrome-like Inflammation."  Author(s):Ciecko AE,Foda B,Barr JY,Ramanathan S,Atkinson MA,Serreze DV,Geurts AM,Lieberman SM,Chen YG PubMed Article URL:http://dx.doi.org/10.1016/j.celrep.2019.11.010

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, 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.

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.

25-7177 was used in Flow cytometry/Cell sorting to indicate that bacteriophages can alter mucosal immunity to impact mammalian health. Cell host & microbe (2019; 25: 285) Mouse / Not Cited "Expansion of Bacteriophages Is Linked to Aggravated Intestinal Inflammation and Colitis." Author(s):Gogokhia L,Buhrke K,Bell R,Hoffman B,Brown DG,Hanke-Gogokhia C,Ajami NJ,Wong MC,Ghazaryan A, Valentine JF, Porter N, Martens E, O'Connell R, Jacob V, Scherl E, Crawford C, Stephens WZ, Casjens SR, Longman RS, Round JL PubMed Article URL:http://dx.doi.org/10.1016/j.chom.2019.01.008 25-7177 was used in Flow cytometry/Cell sorting to reveal a significant effect of the IL-23/PI3K/mTORC1 axis on regulating IL-22 production and also identify a novel role of IL-22 in controlling antiviral T cell responses in the nonlymphoid and lymphoid organs during acute and persistent viral infections. Mouse / Not Cited Scientific reports (2017: 7:) "A tightly regulated IL-22 response maintains immune functions and homeostasis in systemic viral infection." Author(s):Yi P,Liang Y,Yuan DMK,Jie Z,Kwota Z,Chen Y,Cong Y,Fan X,Sun J PubMed Article URL:http://dx.doi.org/10.1038/s41598-017-04260-0 1 Western Blot References Species / Dilution **Summary** 25-7177-82 was used in Western Blot to indicate that the treatment of RA with TFRD is closely related to inhibiting Th17 differentiation and inflammatory response of synoviocytes. Drug design, development and therapy (2022; 16: 1743) Rat / Not Cited "Network Pharmacology Analysis and Experimental Validation to Investigate the Mechanism of Total Flavonoids of Rhizoma Drynariae in Treating Rheumatoid Arthritis." Author(s):Chen GY,Luo J,Liu Y,Yu XB,Liu XY,Tao QW PubMed Article URL:http://dx.doi.org/10.2147/DDDT.S354946 1 Miscellaneous PubMed References Species / Dilution Summary 25-7177-82 was used in Flow Cytometry to examine the impact of IL-1 signaling, a key regulator of the IL-17 pathway, in different cell types within the CRC microenvironment. Immunity (2019; 50: 166) "Cell-Type-Specific Responses to Interleukin-1 Control Microbial Invasion and Tumor-Elicited Inflammation in Mouse / Not Cited Colorectal Cancer." Author(s):Dmitrieva-Posocco O,Dzutsev A,Posocco DF,Hou V,Yuan W,Thovarai V,Mufazalov IA,Gunzer M,Shilovskiy IP, Khaitov MR, Trinchieri G, Waisman A, Grivennikov SI PubMed Article URL:http://dx.doi.org/10.1016/j.immuni.2018.11.015 1 Functional Assay References Species / Dilution Summary International immunopharmacology (2011; 11: 569) "Anti-IL-23 antibody blockade of IL-23/IL-17 pathway attenuates airway obliteration in rat orthotopic tracheal Not Applicable / Not Cited transplantation." Author(s):Cao H,Lan Q,Shi Q,Zhou X,Liu G,Liu J,Tang G,Qiu C,Qiu C,Xu J,Fan H,Liu Z PubMed Article URL:http://dx.doi.org/10.1016/j.intimp.2010.11.007 1 Immunohistochemistry (Paraffin) References Species / Dilution Summary

BMC immunology (2011; 12:)

Not Applicable / Not Cited

"Role of epithelial integrin-linked kinase in promoting intestinal inflammation: effects on CCL2, fibronectin and the T cell repertoire.'

Author(s): Assi K, Patterson S, Dedhar S, Owen D, Levings M, Salh B PubMed Article URL:http://dx.doi.org/10.1186/1471-2172-12-42

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

er warranted to operate or person 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 Documental individuals. Unless otherwise stated in the Documental individuals and the product of the product of the person of the product of the person of the person of the product of the person of the perso

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 DURING THE WARR PERIOD IS LIMITED TO REPAIR, REPLACE OR REFUND FOR TREDUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (III) MISUS FAULT OR RECLUCION FOR PRODUCTS AS THE RESULT OF (III) A CONDENT IN A MANNIFER FOR WHICH THEY WERE NOT DESIGNED, OR (IVI) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is infor research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, or vitro diagnostic uses, or any type of consumption by or application to human or animals.