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CD45.2 Monoclonal Antibody (104), PerCP-Cyanine5.5, eBioscience™

Catalog Number 45-0454-82

Product data sheet

Details	
Size	100 µg
Host/Isotope	Mouse / IgG2a, kappa
Class	Monoclonal
Type	Antibody
Clone	104
Conjugate	PerCP-Cyanine5.5
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage Conditions	4° C, store in dark, DO NOT FREEZE!

Species Reactivity	
Species reactivity	Mouse
Published species	Fish, Mouse, Not Applicable

Tested Applications	Dilution *
Flow Cytometry (Flow)	1 µg/test

Published Applications	
Flow Cytometry (Flow)	See 54 publications below

* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.

Product specific information

Description: The 104 monoclonal antibody reacts with the mouse CD45 molecule, the leukocyte common antigen (LCA) in CD45.2-expressing mouse strains. The strains that express CD45.2 include the most commonly used mouse strains C57BL/6, BALB/c, C58, DBA/1, DBA/2, C3H/He, CBA, 129, A and AKR. CD45.2 is expressed by all leukocytes in these strains. Applications Reported: This 104 antibody has been reported for use in flow cytometric analysis. Applications Tested: This 104 antibody has been tested by flow cytometric analysis of BALB/c splenocytes. This can be used at less than or equal to 1 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

CD45.2 (LCA, leukocyte common antigen) is a receptor-type protein tyrosine phosphatase ubiquitously expressed in all nucleated hematopoietic cells, comprising approximately 10% of all surface proteins in lymphocytes. CD45.2 glycoprotein is crucial in lymphocyte development and antigen signaling, serving as an important regulator of Src-family kinases. CD45.2 protein exists as multiple isoforms as a result of alternative splicing; these isoforms differ in their extracellular domains, whereas they share identical transmembrane and cytoplasmic domains. These isoforms differ in their ability to translocate into the glycosphingolipid-enriched membrane domains and their expression depends on cell type and physiological state of the cell. Besides the role in immunoreceptor signaling, CD45.2 is important in promoting cell survival by modulating integrin-mediated signal transduction pathway and is also involved in DNA fragmentation during apoptosis. CD45RA is an isoform of the CD45 complex and has restricted expression between different subtypes of lymphoid cells.

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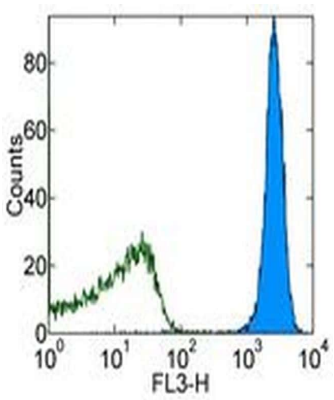
Product Images For CD45.2 Monoclonal Antibody (104), PerCP-Cyanine5.5, eBioscience™



CD45.2 Antibody (45-0454-82) in Flow

Staining of BALB/c splenocytes with 0.5 µg of Mouse IgG2a K Isotype Control PerCP-Cyanine5.5 (Product # 45-4724-82) (open histogram) or 0.5 µg of Anti-Mouse CD45.2 PerCP-Cyanine5.5 (filled histogram). Cells in the lymphocyte gate were used for analysis.

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PubMed References For CD45.2 Monoclonal Antibody (104), PerCP-Cyanine5.5, eBioscience™

54 Flow Cytometry References

Species / Dilution	Summary
Mouse / Not Cited	45-0454 was used in Flow cytometry/Cell sorting to investigate the role of the transcriptional repressor Snai3 protein in the derivation of cells of the haematopoietic system. European journal of immunology (2012; 42: 1038) **"Overexpression of Snai3 suppresses lymphoid- and enhances myeloid-cell differentiation."** Author(s):Dahlem T,Cho S,Spangrude GJ,Weis JJ,Weis JH PubMed Article URL:http://dx.doi.org/10.1002/eji.201142193
Mouse / Not Cited	45-0454 was used in Flow cytometry/Cell sorting to study the Notch-Delta interactions that promote T cell development. The Journal of experimental medicine (2007; 204: 331) **"Hierarchy of Notch-Delta interactions promoting T cell lineage commitment and maturation."** Author(s):Besseyrias V,Fiorini E,Strobl LJ,Zimber-Strobl U,Dumortier A,Koch U,Arcangeli ML,Ezine S,Macdonald HR, Radtke F PubMed Article URL:http://dx.doi.org/10.1084/jem.20061442
Mouse / Not Cited	45-0454 was used in Flow cytometry/Cell sorting to highlight viruses as attractive tools for eliciting effective antitumour responses upon DC vaccination. The Journal of clinical investigation (2011; 121: 2570) **"Virus-induced tumor inflammation facilitates effective DC cancer immunotherapy in a Treg-dependent manner in mice."** Author(s):Woller N,Knocke S,Mundt B,Gürlevik E,Strüver N,Kloos A,Boozari B,Schache P,Manns MP,Malek NP, Sparwasser T,Zender L,Wirth TC,Kubicka S,Kühnel F PubMed Article URL:http://dx.doi.org/10.1172/JCI45585
Mouse / Not Cited	45-0454 was used in Flow cytometry/Cell sorting to investigate the role of the peripheral B cell pro-survival cytokine BAFF /BLyS in the regulation of immunological tolerance and autoreactive cells. Journal of immunology (Baltimore, Md. : 1950) (2011; 187: 37) **"Cellular competition independent of BAFF/B lymphocyte stimulator results in low frequency of an autoreactive clonotype in mature polyclonal B cell compartments."** Author(s):Nikbakht N,Migone TS,Ward CP,Manser T PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1003924
Mouse / Not Cited	45-0454-82 was used in Flow cytometry/Cell sorting to reveal that differential dynamics of Bach2 protein and transcripts in activated B cells control their cell-fate outcomes and imprint the fates of their descendant effector cells. Cell reports (2022; 40:) **"Diverging regulation of Bach2 protein and RNA expression determine cell fate in early B cell response."** Author(s):Hu Q,Xu T,Zhang M,Zhang H,Liu Y,Li HB,Chen C,Zheng J,Zhang Z,Li F,Shen N,Zhang W,Melnick A,Huang C PubMed Article URL:http://dx.doi.org/10.1016/j.celrep.2022.111035
Mouse / Not Cited	45-0454-82 was used in Flow Cytometry to suggest an in vivo role of the inflammatory RIPK1-caspase-8-FADD (FADDosome) complex and reveal a FADD-independent inflammatory role of caspase-8 that involves activation of an inflammasome. Immunity (2020; 52: 994) **"Caspase-8-Dependent Inflammatory Responses Are Controlled by Its Adaptor, FADD, and Necroptosis."** Author(s):Tummers B,Mari L,Guy CS,Heckmann BL,Rodriguez DA,Rühl S,Moretti J,Crawford JC,Fitzgerald P,Kanneganti TD,Janke LJ,Pelletier S,Blander JM,Green DR PubMed Article URL:http://dx.doi.org/10.1016/j.immuni.2020.04.010
Mouse / Not Cited	45-0454-82 was used in Flow Cytometry to show increased formation of Tfh precursors (pre-Tfh) but no associated increase in germinal centre (GC)-Tfh cells in aged mice, suggesting age-driven promotion of only early Tfh cell differentiation. Aging cell (2021; 20:) **"Ageing promotes early T follicular helper cell differentiation by modulating expression of RBPJ."** Author(s):Webb LMC,Fra-Bido S,Innocentin S,Matheson LS,Attaf N,Bignon A,Novarino J,Fazilleau N,Linterman MA PubMed Article URL:http://dx.doi.org/10.1111/acel.13295
Mouse / Not Cited	45-0454 was used in Flow cytometry/Cell sorting to provide evidence that IFN- acts to control infection by directly promoting myeloid cell differentiation. Journal of immunology (Baltimore, Md. : 1950) (2011; 186: 1032) **"Infection-induced myelopoiesis during intracellular bacterial infection is critically dependent upon IFN-signaling."** Author(s):MacNamara KC,Oduro K,Martin O,Jones DD,McLaughlin M,Choi K,Borjesson DL,Winslow GM PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1001893

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	45-0454-82 was used in Flow cytometry/Cell sorting to investigate whether inflammasomes provide sufficient signals to activate adaptive immunity.
Mouse / 1:100	eLife (2021; 10:) **"Inflammasome activation leads to cDC1-independent cross-priming of CD8 T cells by epithelial cell-derived antigen."** Author(s):Deets KA,Nichols Doyle R,Rauch I,Vance RE PubMed Article URL:http://dx.doi.org/10.7554/eLife.72082
Mouse / Not Cited	45-0454 was used in Flow cytometry/Cell sorting to elucidate the causal relationship between obesity-induced insulin resistance, and macrophage accumulation and inflammation in adipose tissue.
	The Journal of clinical investigation (2018; 128: 1538) **"Insulin resistance causes inflammation in adipose tissue."** Author(s):Shimobayashi M,Albert V,Woelnerhanssen B,Frei IC,Weissenberger D,Meyer-Gerspach AC,Clement N,Moes S,Colombi M,Meier JA,Swierczynska MM,Jenö P,Beglinger C,Peterli R,Hall MN PubMed Article URL:http://dx.doi.org/10.1172/JCI96139
Mouse / Not Cited	45-0454 was used in Flow cytometry/Cell sorting to study how the requirements for Runx1 in erythroid/myeloid progenitors and hematopoietic stem cell formation are temporally distinct.
	Development (Cambridge, England) (2013; 140: 3765) **"Distinct temporal requirements for Runx1 in hematopoietic progenitors and stem cells."** Author(s):Tober J,Yzaguirre AD,Piwarzyk E,Speck NA PubMed Article URL:http://dx.doi.org/10.1242/dev.094961
Mouse / Not Cited	45-0454 was used in Flow cytometry/Cell sorting to show EBI2-mediated chemotaxis provides a third dimension to B cell migration that balances and integrates with the inputs from CXCR5 and CCR7 to determine B cell positioning.
	Journal of immunology (Baltimore, Md. : 1950) (2011; 187: 4621) **"EBI2 operates independently of but in cooperation with CXCR5 and CCR7 to direct B cell migration and organization in follicles and the germinal center."** Author(s):Gatto D,Wood K,Brink R PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1101542
Mouse / 1:150	45-0454 was used in Flow cytometry/Cell sorting to describe the in vivo ribopuromycylation method.
	Journal of immunology (Baltimore, Md. : 1950) (2016; 197: 1498) **"Protein Translation Activity: A New Measure of Host Immune Cell Activation."** Author(s):Seedhom MO,Hickman HD,Wei J,David A,Yewdell JW PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1600088
Mouse / Not Cited	45-0454-82 was used in Flow Cytometry to show that intestine-draining mesenteric lymph nodes (MLNs), not intestine proper, are the dominant site of SFB-induced intestinal Th17 cell differentiation.
	Cell reports (2021; 36:) **"Redundant cytokine requirement for intestinal microbiota-induced Th17 cell differentiation in draining lymph nodes."** Author(s):Sano T,Kageyama T,Fang V,Kedmi R,Martinez CS,Talbot J,Chen A,Cabrera I,Gorshko O,Kurakake R,Yang Y,Ng C,Schwab SR,Littman DR PubMed Article URL:http://dx.doi.org/10.1016/j.celrep.2021.109608
Mouse / Not Cited	45-0454 was used in Flow cytometry/Cell sorting to investigate the role of IL-33 in cancer immune-surveillance against primary tumours.
	Scientific reports (2016; 6:) **"Discovery of a Metastatic Immune Escape Mechanism Initiated by the Loss of Expression of the Tumour Biomarker Interleukin-33."** Author(s):Saranchova I,Han J,Huang H,Fenninger F,Choi KB,Munro L,Pfeifer C,Welch I,Wyatt AW,Fazli L,Gleave ME,Jefferies WA PubMed Article URL:http://dx.doi.org/10.1038/srep30555
Mouse / Not Cited	45-0454-82 was used in Flow cytometry/Cell sorting to demonstrate that pathology initiates dermis-specific macrophage differentiation and show that aGVHD-primed macrophages continue to dominate the dermal compartment at the relative expense of quiescent MHCIIint cells.
	Cell reports (2022; 39:) **"Loss of T cell tolerance in the skin following immunopathology is linked to failed restoration of the dermal niche by recruited macrophages."** Author(s):West HC,Davies J,Henderson S,Adegun OK,Ward S,Ferrer IR,Tye CA,Vallejo AF,Jardine L,Collin M,Polak ME,Bennett CL PubMed Article URL:http://dx.doi.org/10.1016/j.celrep.2022.110819

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	45-0454 was used in Flow cytometry/Cell sorting to study how exploitation of immunosuppressive effects by L.major following rapid uptake by skin neutrophils allows inhibition of acquired resistance.
Mouse / Not Cited	PLoS pathogens (2012; 8:) **"Efficient capture of infected neutrophils by dendritic cells in the skin inhibits the early anti-leishmania response."** Author(s):Ribeiro-Gomes FL,Peters NC,Debrabant A,Sacks DL PubMed Article URL:http://dx.doi.org/10.1371/journal.ppat.1002536
	45-0454-82 was used in Flow Cytometry to show that IL-22, a cytokine produced by RORt+ lymphocytes inhibits IL-13-induced tuft cell differentiation in vitro, and suppresses the tuft cell-type 2 immune circuit and small intestine lengthening in vivo, highlighting its key role in gut tissue remodeling.
Mouse / Not Cited	Nature communications (2021; 12:) **"Mitochondrial transcription factor A in RORt⁺ lymphocytes regulate small intestine homeostasis and metabolism."** Author(s):Fu Z,Dean JW,Xiong L,Dougherty MW,Oliff KN,Chen ZE,Jobin C,Garrett TJ,Zhou L PubMed Article URL:http://dx.doi.org/10.1038/s41467-021-24755-9
	45-0454-82 was used in Flow Cytometry to identify a transcriptional program that links the CD4+ lineage with Tfh differentiation, a limiting factor for efficient B cell responses.
Mouse / Not Cited	Immunity (2019; 51: 465) **"A Thpok-Directed Transcriptional Circuitry Promotes Bcl6 and Maf Expression to Orchestrate T Follicular Helper Differentiation."** Author(s):Vacchio MS,Ciucci T,Gao Y,Watanabe M,Balmaceno-Criss M,McGinty MT,Huang A,Xiao Q,McConkey C,Zhao Y,Shetty J,Tran B,Pepper M,Vahedi G,Jenkins MK,McGavern DB,Bosselut R PubMed Article URL:http://dx.doi.org/10.1016/j.immuni.2019.06.023
	45-0454 was used in Flow cytometry/Cell sorting to identify discrete lineages of intestinal antigen-specific CD8+ T cells, including a Blimp1hiId3lo tissue-resident effector cell population most prominent in the early phase of acute viral and bacterial infections and a molecularly distinct Blimp1loId3hi tissue-resident memory population that subsequently accumulated at later infection time points.
Mouse / Not Cited	Immunity (2020; 52: 808) **"Heterogenous Populations of Tissue-Resident CD8⁺ T Cells Are Generated in Response to Infection and Malignancy."** Author(s):Milner JJ,Toma C,He Z,Kurd NS,Nguyen QP,McDonald B,Quezada L,Widjaja CE,Witherden DA,Crowl JT,Shaw LA,Yeo GW,Chang JT,Omilusik KD,Goldrath AW PubMed Article URL:http://dx.doi.org/10.1016/j.immuni.2020.04.007
	45-0454-82 was used in Flow cytometry/Cell sorting to surmise that immunological, metabolic, epithelial, and microbial modes of action of the live E. hirae cooperate to circumvent primary resistance to therapy.
Mouse / Not Cited	Cell death and differentiation (2021; 28: 2276) **"Multifaceted modes of action of the anticancer probiotic Enterococcus hirae."** Author(s):Goubet AG,Wheeler R,Fluckiger A,Qu B,Lemaître F,Iribarren K,Mondragón L,Tidjani Alou M,Pizzato E,Durand S,Derosa L,Aprahamian F,Bossut N,Moya-Nilges M,Derrien D,Chen G,Leduc M,Joseph A,Pons N,Le Chatelier E,Segata N,Yonekura S,Iebba V,Kepp O,Raoult D,André F,Kroemer G,Boneca IG,Zitvogel L,Daillère R PubMed Article URL:http://dx.doi.org/10.1038/s41418-021-00753-8
	45-0454 was used in Flow cytometry/Cell sorting to study the role of type 2 innate lymphoid cells in enhancing anti-cancer immunity and controlling metastasis.
Mouse / Not Cited	Scientific reports (2018; 8:) **"Type 2 Innate Lymphocytes Actuate Immunity Against Tumours and Limit Cancer Metastasis."** Author(s):Saranchova I,Han J,Zaman R,Arora H,Huang H,Fenninger F,Choi KB,Munro L,Pfeifer CG,Welch I,Takei F,Jefferies WA PubMed Article URL:http://dx.doi.org/10.1038/s41598-018-20608-6
	45-0454 was used in Flow cytometry/Cell sorting to show that despite impaired proliferation and IL2 production, tolerant T cells can display inflammatory responses in response to antigen stimulation and this is controlled at least partly by Egr2 and 3.
Mouse / Not Cited	Immunity, inflammation and disease (2018; 6: 221) **"Transcription factors early growth response gene (Egr) 2 and 3 control inflammatory responses of tolerant T cells."** Author(s):Omodho B,Miao T,Symonds ALJ,Singh R,Li S,Wang P PubMed Article URL:http://dx.doi.org/10.1002/iid3.210

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	45-0454 was used in Flow cytometry/Cell sorting to test the prediction that RARA (retinoic acid receptor alpha) haploinsufficiency would contribute to acute promyelocytic leukemia (APL) pathogenesis.
Mouse / Not Cited	Blood (2011; 117: 2460) **"Rara haploinsufficiency modestly influences the phenotype of acute promyelocytic leukemia in mice."** Author(s):Welch JS,Klco JM,Varghese N,Nagarajan R,Ley TJ PubMed Article URL:http://dx.doi.org/10.1182/blood-2010-08-300087
	45-0454 was used in Flow cytometry/Cell sorting to elucidate the initial factors that trigger the inflammatory cascade during angiotensin II-induced cardiovascular injury.
Mouse / Not Cited	Hypertension (Dallas, Tex. : 1979) (2014; 63: 1241) **"S100a8/a9 released by CD11b+Gr1+ neutrophils activates cardiac fibroblasts to initiate angiotensin II-Induced cardiac inflammation and injury."** Author(s):Wu Y,Li Y,Zhang C,A X,Wang Y,Cui W,Li H,Du J PubMed Article URL:http://dx.doi.org/10.1161/HYPERTENSIONAHA.113.02843
	45-0454 was used in Flow cytometry/Cell sorting to report that the small molecule YH250 stimulates hematopoiesis in lethally or sublethally irradiated mice.
Mouse / Not Cited	PloS one (2017; 12:) **"Small molecule p300/catenin antagonist enhances hematopoietic recovery after radiation."** Author(s):Zhao Y,Wu K,Nguyen C,Smbatyan G,Melendez E,Higuchi Y,Chen Y,Kahn M PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0177245
	45-0454 was used in Flow cytometry/Cell sorting to investigate how dual TCR rearrangements enhance positive selection and alter allo- and autoreactive T cell repertoires.
Mouse / Not Cited	Journal of immunology (Baltimore, Md. : 1950) (2014; 193: 1778) **"The ability to rearrange dual TCRs enhances positive selection, leading to increased Allo- and Autoreactive T cell repertoires."** Author(s):Ni PP,Solomon B,Hsieh CS,Allen PM,Morris GP PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1400532
	45-0454 was used in Flow cytometry/Cell sorting to identify a critical regulatory circuit that tailors HSC responses to acute needs, and is likely to underlie deregulated blood homeostasis in chronic inflammation conditions.
Mouse / Not Cited	Nature cell biology (2016; 18: 607) **"Chronic interleukin-1 exposure drives haematopoietic stem cells towards precocious myeloid differentiation at the expense of self-renewal."** Author(s):Pietras EM,Mirantes-Barbeito C,Fong S,Loeffler D,Kovtonyuk LV,Zhang S,Lakshminarasimhan R,Chin CP, Techner JM,Will B,Nerlov C,Steidl U,Manz MG,Schroeder T,Passegué E PubMed Article URL:http://dx.doi.org/10.1038/ncb3346
	45-0454 was used in Flow cytometry/Cell sorting to identify a novel pathway of cross-talk between macrophages and dendritic cells.
Mouse / Not Cited	Immunology (2016; 149: 157) **"Macrophages transfer antigens to dendritic cells by releasing exosomes containing dead-cell-associated antigens partially through a ceramide-dependent pathway to enhance CD4(+) T-cell responses."** Author(s):Xu Y,Liu Y,Yang C,Kang L,Wang M,Hu J,He H,Song W,Tang H PubMed Article URL:http://dx.doi.org/10.1111/imm.12630
	45-0454 was used in Flow cytometry/Cell sorting to study the effect of ex vivo-generated and isolated Treg cells on a mouse model of chronic colitis, showing that ex-vivo Tregs were more potent at attenuating colitis, likely due to the associated decrease in IL-6 and IL-17A expression in the colon.
Mouse / Not Cited	Inflammatory bowel diseases (2013; 19: 2282) **"Therapeutic evaluation of ex vivo-generated versus natural regulatory T-cells in a mouse model of chronic gut inflammation."** Author(s):Karlsson F,Martinez NE,Gray L,Zhang S,Tsunoda I,Grisham MB PubMed Article URL:http://dx.doi.org/10.1097/MIB.0b013e31829c32dd
	45-0454-82 was used in Flow Cytometry to provide mechanistic insight into how polymorphisms that attenuate NFKB1 expression predispose humans to epithelial cancers, highlighting the pro-tumorigenic activity of STAT1 and identifying targetable vulnerabilities in gastric cancer.
Mouse / Not Cited	Immunity (2018; 48: 570) **"Loss of NF-B1 Causes Gastric Cancer with Aberrant Inflammation and Expression of Immune Checkpoint Regulators in a STAT-1-Dependent Manner."** Author(s):O'Reilly LA,Putoczki TL,Mielke LA,Low JT,Lin A,Preaudet A,Herold MJ,Yaprianto K,Tai L,Kueh A,Pacini G, Ferrero RL,Gugasyan R,Hu Y,Christie M,Wilcox S,Grumont R,Griffin MDW,O'Connor L,Smyth GK,Ernst M,Waring P, Gerondakis S,Strasser A PubMed Article URL:http://dx.doi.org/10.1016/j.immuni.2018.03.003

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	45-0454-80 was used in Flow Cytometry to detail the host immune and metabolic response during sickness and recovery in a mouse model of malaria.
Mouse / Not Cited	eLife (2020; 9:) **"Metabolic profiling during malaria reveals the role of the aryl hydrocarbon receptor in regulating kidney injury."** Author(s):Lissner MM,Cumnock K,Davis NM,Vilches-Moure JG,Basak P,Navarrete DJ,Allen JA,Schneider D PubMed Article URL:http://dx.doi.org/10.7554/eLife.60165
	45-0454 was used in Flow cytometry/Cell sorting to identify the miR-126-VEGFR2 axis as an important regulator of the innate response that operates through multiscale control of pDCs.
Mouse / Not Cited	Nature immunology (2014; 15: 54) **"The miR-126-VEGFR2 axis controls the innate response to pathogen-associated nucleic acids."** Author(s):Agudo J,Ruzo A,Tung N,Salmon H,Leboeuf M,Hashimoto D,Becker C,Garrett-Sinha LA,Baccarini A,Merad M,Brown BD PubMed Article URL:http://dx.doi.org/10.1038/ni.2767
	45-0454 was used in Flow cytometry/Cell sorting to conclude that primitive hematopoietic cells in bone marrow enter proliferation earlier than leukemic cells after chemotherapy, and gradually lose their regenerative capacity partly by senescence due to accelerated cycling.
Mouse / Not Cited	Journal of translational medicine (2015; 13:) **"Excessive proliferation and impaired function of primitive hematopoietic cells in bone marrow due to senescence post chemotherapy in a T cell acute lymphoblastic leukemia model."** Author(s):Jiang C,Hu X,Wang L,Cheng H,Lin Y,Pang Y,Yuan W,Cheng T,Wang J PubMed Article URL:http://dx.doi.org/10.1186/s12967-015-0543-8
	45-0454 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
	45-0454 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
	45-0454 was used in Flow cytometry/Cell sorting to study a platform for more accurately dissecting the early events in acute promyelocytic leukemia pathogenesis.
Mouse / Not Cited	The Journal of clinical investigation (2011; 121: 1636) **"PML-RARA can increase hematopoietic self-renewal without causing a myeloproliferative disease in mice."** Author(s):Welch JS,Yuan W,Ley TJ PubMed Article URL:http://dx.doi.org/10.1172/JCI42953
	45-0454 was used in Flow cytometry/Cell sorting to investigate the mechanism by which E and Id proteins control the development of invariant NKT sublineages after positive selection.
Mouse / Not Cited	Journal of immunology (Baltimore, Md. : 1950) (2014; 192: 2227) **"E and Id proteins influence invariant NKT cell sublineage differentiation and proliferation."** Author(s):D'Cruz LM,Stradner MH,Yang CY,Goldrath AW PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1302904
	45-0454 was used in Flow cytometry/Cell sorting to demonstrate that adipose tissue-derived mesenchymal stromal cells have significant immune modulatory effects on alloreactively stimulated spleen cells.
Mouse / Not Cited	Experimental and therapeutic medicine (2014; 7: 17) **"Mechanisms of the immunosuppressive effects of mouse adipose tissue-derived mesenchymal stromal cells on mouse alloreactively stimulated spleen cells."** Author(s):Nagaya R,Mizuno-Kamiya M,Takayama E,Kawaki H,Onoe I,Tanabe T,Nagahara K,Kondoh N PubMed Article URL:http://dx.doi.org/10.3892/etm.2013.1382

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	45-0454 was used in Flow cytometry/Cell sorting to investigate whether CD8+ T cells play a non-redundant role in driving bone marrow failure.
Mouse / Not Cited	Journal of autoimmunity (2016; 75: 58) **"CD8⁺ T cells drive autoimmune hematopoietic stem cell dysfunction and bone marrow failure."** Author(s):Gravano DM,Al-Kuhlani M,Davini D,Sanders PD,Manilay JO,Hoyer KK PubMed Article URL:http://dx.doi.org/10.1016/j.jaut.2016.07.007
	45-0454-82 was used in Flow Cytometry to indicate that COX-1 plays an important role in the development of TFH cells.
Mouse / Not Cited	Journal of immunology (Baltimore, Md. : 1950) (2019; 203: 864) **"Cyclooxygenase-1 Regulates the Development of Follicular Th Cells via Prostaglandin E₂."** Author(s):Liu T,Yang Q,Cao YJ,Yuan WM,Lei AH,Zhou P,Zhou W,Liu YD,Shi MH,Yang Q,Tang JY,Wang HK,Zhang H,Yu Y,Zhou J PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1801674
	45-0454 was used in Flow cytometry/Cell sorting to investigate the roles of cIAP1 and cIAP2 in controlling B-cell physiology.
Mouse / Not Cited	Blood (2011; 117: 4041) **"Deletion of cIAP1 and cIAP2 in murine B lymphocytes constitutively activates cell survival pathways and inactivates the germinal center response."** Author(s):Gardam S,Turner VM,Anderton H,Limaye S,Basten A,Koentgen F,Vaux DL,Silke J,Brink R PubMed Article URL:http://dx.doi.org/10.1182/blood-2010-10-312793
	45-0454 was used in Flow cytometry/Cell sorting to explore the relationship between repertoires of IgE and IgG1 in vivo.
Mouse / Not Cited	PLoS biology (2016; 13:) **"The Extracellular Domains of IgG1 and T Cell-Derived IL-4/IL-13 Are Critical for the Polyclonal Memory IgE Response In Vivo."** Author(s):Turqueti-Neves A,Otte M,Schwartz C,Schmitt ME,Lindner C,Pabst O,Yu P,Voehringer D PubMed Article URL:http://dx.doi.org/10.1371/journal.pbio.1002290
	45-0454 was used in Flow cytometry/Cell sorting to study the mechanisms and signals that produce mature DCs.
Mouse / Not Cited	Journal of immunology (Baltimore, Md. : 1950) (2013; 190: 5545) **"SWAP-70 restricts spontaneous maturation of dendritic cells."** Author(s):Ocaña-Morgner C,Götz A,Wahren C,Jessberger R PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1203095
	45-0454-82 was used in Flow Cytometry to show that S1PR4 may be a new therapeutic target for NASH that mediates the activation of NLRP3 inflammasome in hepatic macrophages.
Mouse / Not Cited	Cellular and molecular gastroenterology and hepatology (2022; 13: 925) **"Sphingosine 1-Phosphate Receptor 4 Promotes Nonalcoholic Steatohepatitis by Activating NLRP3 Inflammasome."** Author(s):Hong CH,Ko MS,Kim JH,Cho H,Lee CH,Yoon JE,Yun JY,Baek IJ,Jang JE,Lee SE,Cho YK,Baek JY,Oh SJ,Lee BY,Lim JS,Lee J,Hartig SM,Conde de la Rosa L,Garcia-Ruiz C,Lee KU,Fernández-Checa JC,Choi JW,Kim S,Koh EH PubMed Article URL:http://dx.doi.org/10.1016/j.jcmgh.2021.12.002
	45-0454 was used in Flow cytometry/Cell sorting to study the role of regulatory T cells during Trypanosoma cruzi infection.
Mouse / Not Cited	Frontiers in immunology (2019; 9:) **"Limited Foxp3⁺ Regulatory T Cells Response During Acute Trypanosoma cruzi Infection Is Required to Allow the Emergence of Robust Parasite-Specific CD8⁺ T Cell Immunity."** Author(s):Araujo Furlan CL,Tosello Boari J,Rodriguez C,Canale FP,Fiocca Vernengo F,Boccardo S,Beccaria CG,Adoue V,Joffre O,Gruppi A,Montes CL,Acosta Rodriguez EV PubMed Article URL:http://dx.doi.org/10.3389/fimmu.2018.02555
	45-0454 was used in Flow cytometry/Cell sorting to study the ways in which tumour masses support naive T cell functions.
Mouse / Not Cited	The Journal of experimental medicine (2010; 207: 1791) **"Tumor masses support naive T cell infiltration, activation, and differentiation into effectors."** Author(s):Thompson ED,Enriquez HL,Fu YX,Engelhard VH PubMed Article URL:http://dx.doi.org/10.1084/jem.20092454
	45-0454 was used in Flow cytometry/Cell sorting to describe the use of parabiosis to define cell ontogeny in a mouse model of breast cancer.
Mouse / 1:300	Bio-protocol (2015; 5:) **"Determining Leukocyte Origins Using Parabiosis in the PyMT Breast Tumor Model."** Author(s):Franklin RA,Li MO PubMed Article URL:http://dx.doi.org/10.21769/bioprotoc.1567

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	45-0454-82 was used in Flow Cytometry to suggest that ECs are no innocent bystanders in CF pathology, but rather may contribute to the exaggerated inflammatory phenotype, raising the question whether normalisation of vascular inflammation might be a novel therapeutic strategy to ameliorate the disease severity of CF.
Mouse / Not Cited	The European respiratory journal (2021; 57:) **"Transcriptomic analysis of CFTR-impaired endothelial cells reveals a pro-inflammatory phenotype."** Author(s):Declercq M,de Zeeuw P,Conchinha NV,Geldhof V,Ramalho AS,García-Caballero M,Brepoels K,Ensinck M, Carlon MS,Bird MJ,Vinckier S,Proesmans M,Vermeulen F,Dupont L,Ghesquière B,Dewerchin M,Carmeliet P,Cassiman D, Treps L,Eelen G,Witters P PubMed Article URL:http://dx.doi.org/10.1183/13993003.00261-2020
	45-0454 was used in Flow cytometry/Cell sorting to characterise the previously unrecognised capacity of the thymus to sustain T cell development during bone marrow progenitor deprivation.
Mouse / Not Cited	The Journal of experimental medicine (2012; 209: 1409) **"Thymus-autonomous T cell development in the absence of progenitor import."** Author(s):Martins VC,Ruggiero E,Schlenner SM,Madan V,Schmidt M,Fink PJ,von Kalle C,Rodewald HR PubMed Article URL:http://dx.doi.org/10.1084/jem.20120846
	45-0454-82 was used in Flow Cytometry to conclude that SNAI2 is a critical regulator of the transcriptional network maintaining MSPCs by the suppression of osteopontin expression.
Mouse / Not Cited	Developmental cell (2020; 53: 503) **"Snai2 Maintains Bone Marrow Niche Cells by Repressing Osteopontin Expression."** Author(s):Wei Q,Nakahara F,Asada N,Zhang D,Gao X,Xu C,Alfieri A,Brodin NP,Zimmerman SE,Mar JC,Guha C,Guo W, Frenette PS PubMed Article URL:http://dx.doi.org/10.1016/j.devcel.2020.04.012
	45-0454 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	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
	45-0454-82 was used in Flow cytometry/Cell sorting to identify CD140+GP38+SCA-1- as a source of fibroblast progenitors and define SCA-1 as a marker for developmental stages of thymic fibroblast differentiation.
Mouse / Not Cited	Development (Cambridge, England) (2022; 149:) **"Identification of fibroblast progenitors in the developing mouse thymus."** Author(s):Ferreirinha P,Pinheiro RGR,Landry JJM,Alves NL PubMed Article URL:http://dx.doi.org/10.1242/dev.200513
	45-0454 was used in Flow cytometry/Cell sorting to show that low-dose radiotherapy with particularly a single dose of 0.5 Gray has no harmful effects on cells of healthy joints.
Mouse / Not Cited	International journal of molecular sciences (2018; 19:) **"Low-Dose Radiotherapy Has No Harmful Effects on Key Cells of Healthy Non-Inflamed Joints."** Author(s):Deloch L,Rückert M,Fietkau R,Frey B,Gaipl US PubMed Article URL:http://dx.doi.org/10.3390/ijms19103197

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