

CD3e Monoclonal Antibody (145-2C11), PE-Cyanine5, eBioscience™

Catalog Number 15-0031-81

Product data sheet

Details	
Size	50 µg
Host/Isotope	Armenian hamster / IgG
Class	Monoclonal
Type	Antibody
Clone	145-2C11
Conjugate	PE-Cyanine5
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	Mouse, Human, Not Applicable
Tested Applications	
Flow Cytometry (Flow)	0.25 µg/test
Published Applications	
Flow Cytometry (Flow)	See 49 publications below
Immunohistochemistry (Frozen) (IHC (F))	See 2 publications below
Functional Assay (FN)	See 1 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 145-2C11 monoclonal antibody reacts with mouse CD3e, a 20 kDa subunit of the TCR complex. Along with the other CD3 subunits, gamma and delta, the epsilon chain is required for proper assembly, trafficking and surface expression of the TCR complex. CD3 is expressed by thymocytes in a developmentally regulated manner and by all mature T cells. Binding of 145-2C11 to TCR initiates the intracellular biochemical pathway resulting in cellular activation, proliferation, and apoptosis depending on specific conditions utilized. 145-2C11 is commonly used as a phenotypic marker for mouse T cells. Applications Reported: The 145-2C11 antibody has been reported for use in flow cytometric analysis. Applications Tested: The 145-2C11 antibody has been tested by flow cytometric analysis of mouse thymocytes and 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. Light sensitivity: This tandem dye is sensitive 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 cell sample + 100 µL 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: 667 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser. Filtration: 0.2 µm post-manufacturing filtered.

Background/Target Information

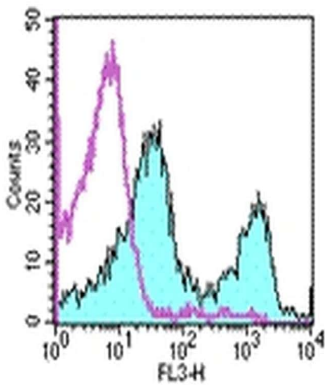
The CD3 subunit complex which is crucial in transducing antigen-recognition signals into the cytoplasm of T cells and in regulating the cell surface expression of the TCR complex. T cell activation through the antigen receptor (TCR) involves the cytoplasmic tails of the CD3 subunits CD3 gamma, CD3 delta, CD3 epsilon and CD3 zeta. These CD3 subunits are structurally related members of the immunoglobulins super family encoded by closely linked genes on human chromosome 11. The CD3 components have long cytoplasmic tails that associate with cytoplasmic signal transduction molecules and this association is mediated at least in part by a double tyrosine-based motif present in a single copy in the CD3 subunits. CD3 may play a role in TCR-induced growth arrest, cell survival and proliferation. The CD3 antigen is present on 68-82% of normal peripheral blood lymphocytes, 65-85% of thymocytes and Purkinje cells in the cerebellum. It is never expressed on B or NK cells. Decreased percentages of T lymphocytes may be observed in some autoimmune diseases. The genes encoding the CD3 epsilon, gamma and delta polypeptides are located on chromosome 11. Defects in the CD3 gene are associated with CD3 immunodeficiency.

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CD3e Antibody (15-0031-81) in Flow

Staining of BALB/c splenocytes with staining buffer (autofluorescence) (open histogram) or 0.125 µg of Anti-Mouse CD3e PE-Cyanine5 (filled histogram).Total cells were used for analysis.

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49 Flow Cytometry References

Species / Dilution	Summary
	<p>15-0031 was used in Flow cytometry/Cell sorting to investigate whether T cells and/or NK cells contribute to circulatory control during pregnancy.</p>
Mouse / Not Cited	<p>Biology of reproduction (2011; 85: 605) "Cardiovascular adaptations of pregnancy in T and B cell-deficient mice." Author(s):Burke SD,Barrette VF,Carter AL,Gravel J,Adams MA,Croy BA PubMed Article URL:http://dx.doi.org/10.1095/biolreprod.111.092668</p>
	<p>15-0031 was used in Flow cytometry/Cell sorting to study the use of a combined immunogene therapy and regulatory T-cell inactivation against weakly immunogenic solid tumours.</p>
Mouse / Not Cited	<p>Cancer gene therapy (2010; 17: 501) "Effective immunotherapy of weakly immunogenic solid tumours using a combined immunogene therapy and regulatory T-cell inactivation." Author(s):Whelan MC,Casey G,MacConmara M,Lederer JA,Soden D,Collins JK,Tangney M,O'Sullivan GC PubMed Article URL:http://dx.doi.org/10.1038/cgt.2010.8</p>
	<p>15-0031 was used in Flow cytometry/Cell sorting to generate vaccine platforms targeting a malarial parasite protein and assess them for protective efficacy.</p>
Mouse / Not Cited	<p>Clinical and vaccine immunology : CVI (2017; 24:) "Evaluation of Plasmodium vivax Cell-Traversal Protein for Ookinetes and Sporozoites as a Preerythrocytic P. vivax Vaccine." Author(s):Alves E,Salman AM,Leoratti F,Lopez-Camacho C,Viveros-Sandoval ME,Lall A,El-Turabi A,Bachmann MF,Hill AV,Janse CJ,Khan SM,Reyes-Sandoval A PubMed Article URL:http://dx.doi.org/10.1128/CVI.00501-16</p>
	<p>15-0031 was used in Flow cytometry/Cell sorting to suggest differential roles of DC-NK cell cross talk at different stages of Leishmania infection.</p>
Mouse / Not Cited	<p>Infection and immunity (2008; 76: 5100) "Role of natural killer cells in modulating dendritic cell responses to Leishmania amazonensis infection." Author(s):Sanabria MX,Vargas-Inchaustegui DA,Xin L,Soong L PubMed Article URL:http://dx.doi.org/10.1128/IAI.00438-08</p>
	<p>15-0031 was used in Flow cytometry/Cell sorting to examine the effects of lactosucrose (4(G)--D-galactosylsucrose) on influenza A virus infections in mice.</p>
Mouse / Not Cited	<p>Bioscience of microbiota, food and health (2015; 34: 67) "Dietary lactosucrose suppresses influenza A (H1N1) virus infection in mice." Author(s):Kishino E,Takemura N,Masaki H,Ito T,Nakazawa M PubMed Article URL:http://dx.doi.org/10.12938/bmfh.2015-005</p>
	<p>15-0031 was used in Flow cytometry/Cell sorting to show that monocyte-derived inflammatory DCs” are a mixture of monocyte-derived MCs that have little migratory and APC potential and bona fide pre-cDCderived, CD26-expressing inf-cDC2s that depend on Flt3L but not on GM-CSF.</p>
Mouse / Not Cited	<p>Immunity (2020; 52: 1039) "Inflammatory Type 2 cDCs Acquire Features of cDC1s and Macrophages to Orchestrate Immunity to Respiratory Virus Infection." Author(s):Bosteels C,Neyt K,Vanheerswynghels M,van Helden MJ,Sichien D,Debeuf N,De Prijck S,Bosteels V,Vandamme N,Martens L,Saeyn Y,Louagie E,Lesage M,Williams DL,Tang SC,Mayer JU,Ronchese F,Scott CL,Hammad H,Guilliams M,Lambrecht BN PubMed Article URL:http://dx.doi.org/10.1016/j.immuni.2020.04.005</p>
	<p>15-0031 was used in Flow cytometry/Cell sorting to demonstrate roles for retinoid signaling and the DERARE in maintaining HSCs and preventing leukemogenesis by coordinate regulation of Hoxb genes.</p>
Mouse / Not Cited	<p>Cell stem cell (2018; 22: 740) "Retinoid-Sensitive Epigenetic Regulation of the Hoxb Cluster Maintains Normal Hematopoiesis and Inhibits Leukemogenesis." Author(s):Qian P,De Kumar B,He XC,Nolte C,Gogol M,Ahn Y,Chen S,Li Z,Xu H,Perry JM,Hu D,Tao F,Zhao M,Han Y,Hall K,Peak A,Paulson A,Zhao C,Venkatraman A,Box A,Perera A,Haug JS,Parmely T,Li H,Krumlauf R,Li L PubMed Article URL:http://dx.doi.org/10.1016/j.stem.2018.04.012</p>

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	15-0031 was used in Flow cytometry/Cell sorting to demonstrate a role for USP16 in antagonising the self-renewal and senescence pathways in Down's syndrome.
Mouse / Not Cited	<p>Nature (2013; 501: 380)</p> <p>"Usp16 contributes to somatic stem-cell defects in Down's syndrome."</p> <p>Author(s):Adorno M,Sikandar S,Mitra SS,Kuo A,Nicolis Di Robilant B,Haro-Acosta V,Ouadah Y,Quarta M,Rodriguez J, Qian D,Reddy VM,Cheshier S,Garner CC,Clarke MF</p> <p>PubMed Article URL:http://dx.doi.org/10.1038/nature12530</p>
Mouse / Not Cited	<p>15-0031 was used in Flow cytometry/Cell sorting to demonstrate how foetal haematopoietic stem cells may acquire adult characteristics between 1 and 2 weeks after birth in mouse bone marrow.</p> <p>Proceedings of the National Academy of Sciences of the United States of America (2006; 103: 17852)</p> <p>"Developmental switch of mouse hematopoietic stem cells from fetal to adult type occurs in bone marrow after birth."</p> <p>Author(s):Kikuchi K,Kondo M</p> <p>PubMed Article URL:http://dx.doi.org/10.1073/pnas.0603368103</p>
Mouse / Not Cited	<p>15-0031 was used in Flow cytometry/Cell sorting to point strongly towards the cell-specific and contextual function of Nlr1 during invasive pulmonary aspergillosis and may lead to novel therapeutics to reduce Th2 responses by CD103+ DCs or heightened recruitment of neutrophils.</p> <p>PLoS pathogens (2020; 16:)</p> <p>"NLRX1 is a key regulator of immune signaling during invasive pulmonary aspergillosis."</p> <p>Author(s):Kastelberg B,Tubau-Juni N,Ayubi T,Leung A,Leber A,Hontecillas R,Bassaganya-Riera J,Kale SD</p> <p>PubMed Article URL:http://dx.doi.org/10.1371/journal.ppat.1008854</p>
Mouse / Not Cited	<p>15-0031 was used in Flow cytometry/Cell sorting to evaluate whether the biological activity of G-CSF can be improved by pre-association with anti-G-CSF monoclonal antibodies prior to injection.</p> <p>Journal of hematology & oncology (2013; 6:)</p> <p>"G-CSF/anti-G-CSF antibody complexes drive the potent recovery and expansion of CD11b+Gr-1+ myeloid cells without compromising CD8+ T cell immune responses."</p> <p>Author(s):Rubinstein MP,Salem ML,Doedens AL,Moore CJ,Chiuzan C,Rivell GL,Cole DJ,Goldrath AW</p> <p>PubMed Article URL:http://dx.doi.org/10.1186/1756-8722-6-75</p>
Mouse / Not Cited	<p>15-0031 was used in Flow cytometry/Cell sorting to explore TIM-3-Gal-9 function in a clinically relevant murine model of hepatic cold storage and orthotopic liver transplantation.</p> <p>American journal of transplantation : official journal of the American Society of Transplantation and the American Society of Transplant Surgeons (2015; 15: 954)</p> <p>"Negative CD4+TIM-3 signaling confers resistance against cold preservation damage in mouse liver transplantation."</p> <p>Author(s):Liu Y, Ji H,Zhang Y,Shen XD,Gao F,Nguyen TT,Shang X,Lee N,Busuttil RW,Kupiec-Weglinski JW</p> <p>PubMed Article URL:http://dx.doi.org/10.1111/ajt.13067</p>
Mouse / Not Cited	<p>15-0031 was used in Flow cytometry/Cell sorting to report several new t-AML/MDS mouse models that could potentially be used to further define disease pathogenesis and test novel therapeutics.</p> <p>PloS one (2017; 11:)</p> <p>"Alkylator-Induced and Patient-Derived Xenograft Mouse Models of Therapy-Related Myeloid Neoplasms Model Clinical Disease and Suggest the Presence of Multiple Cell Subpopulations with Leukemia Stem Cell Activity."</p> <p>Author(s):Jonas BA,Johnson C,Gratzinger D,Majeti R</p> <p>PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0159189</p>
Mouse / 1:200	<p>15-0031-82 was used in Flow Cytometry to reveal mechanistic differences between ATR inhibition and ATR loss.</p> <p>Nature communications (2018; 9:)</p> <p>"Kinase-dead ATR differs from ATR loss by limiting the dynamic exchange of ATR and RPA."</p> <p>Author(s):Menolfi D,Jiang W, Lee BJ,Moiseeva T,Shao Z,Estes V,Frattini MG,Bakkenist CJ,Zha S</p> <p>PubMed Article URL:http://dx.doi.org/10.1038/s41467-018-07798-3</p>
Mouse / Not Cited	<p>15-0031 was used in Flow cytometry/Cell sorting to identify polymorphisms near C1galt1 and its molecular chaperone, Cosmc, were associated with altered composition of the colonic mucosal microbiota.</p> <p>Gut microbes (2017; 8: 1)</p> <p>"Microbial, metabolic, and immunologic dynamics in a relapsing genetic mouse model of colitis induced by T-synthase deficiency."</p> <p>Author(s):Jacobs JP,Lin L,Goudarzi M,Ruegger P,McGovern DP,Fornace AJ,Borneman J,Xia L,Braun J</p> <p>PubMed Article URL:http://dx.doi.org/10.1080/19490976.2016.1257469</p>

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	<p>15-0031 was used in Flow cytometry/Cell sorting to assess the potential of antisense splice-correcting oligonucleotides targeting mutated Bruton's tyrosine kinase transcripts for treating X-linked agammaglobulinemia.</p>
Mouse / Not Cited	<p>The Journal of clinical investigation (2014; 124: 4067) "Splice-correcting oligonucleotides restore BTK function in X-linked agammaglobulinemia model." Author(s):Bestas B,Moreno PM,Blomberg KE,Mohammad DK,Saleh AF,Sutlu T,Nordin JZ,Guterstam P,Gustafsson MO,Kharazi S,Pitosa B,Roberts TC,Behlke MA,Wood MJ,Gait MJ,Lundin KE,El Andaloussi S,Månsson R,Berglöf A,Wengel J,Smith CI PubMed Article URL:http://dx.doi.org/10.1172/JCI76175</p>
	<p>15-0031 was used in Flow cytometry/Cell sorting to indicate that combined blockade of T cell immunoglobulin and mucin domain 3 and carcinoembryonic antigen-related cell adhesion molecule 1 generates robust therapeutic efficacy in mice with intracranial tumours.</p>
Mouse / Not Cited	<p>Medical science monitor : international medical journal of experimental and clinical research (2017; 23: 3593) "Combined Blockade of T Cell Immunoglobulin and Mucin Domain 3 and Carcinoembryonic Antigen-Related Cell Adhesion Molecule 1 Results in Durable Therapeutic Efficacy in Mice with Intracranial Gliomas." Author(s):Li J,Liu X,Duan Y,Liu Y,Wang H,Lian S,Zhuang G,Fan Y PubMed Article URL:http://dx.doi.org/10.12659/msm.903098</p>
	<p>15-0031 was used in Flow cytometry/Cell sorting to study how the interplay between M. tuberculosis and NK cells/APC triggering IFN-gamma may play a beneficial role in tuberculous pleurisy by helping to maintain a type 1 profile.</p>
Human / Not Cited	<p>Infection and immunity (2007; 75: 5325) "Mycobacterium tuberculosis-induced gamma interferon production by natural killer cells requires cross talk with antigen-presenting cells involving Toll-like receptors 2 and 4 and the mannose receptor in tuberculous pleurisy." Author(s):Schierloh P,Yokobori N,Alemán M,Landoni V,Geffner L,Musella RM,Castagnino J,Baldini M,Abbate E,de la Barrera SS,Sasiain MC PubMed Article URL:http://dx.doi.org/10.1128/IAI.00381-07</p>
	<p>15-0031 was used in Flow cytometry/Cell sorting to investigate the immunomodulatory effects of polysaccharide from a marine fungus Phoma herbarum on T cells and dendritic cells.</p>
Mouse / Not Cited	<p>Mediators of inflammation (2015; 2014:) "Immunomodulatory effects of polysaccharide from marine fungus Phoma herbarum YS4108 on T cells and dendritic cells." Author(s):Chen S,Ding R,Zhou Y,Zhang X,Zhu R,Gao XD PubMed Article URL:http://dx.doi.org/10.1155/2014/738631</p>
	<p>15-0031 was used in Flow cytometry/Cell sorting to demonstrate an effect of the NK1R in T cells that is relevant for immunotherapies based on pro-inflammatory neuropeptides and its receptors.</p>
Mouse / Not Cited	<p>Cell reports (2020; 30: 3448) "Neurokinin-1 Receptor Signaling Is Required for Efficient Ca²⁺ Flux in T-Cell-Receptor-Activated T Cells." Author(s):Morelli AE,Sumpter TL,Rojas-Canales DM,Bandyopadhyay M,Chen Z,Tkacheva O,Shufesky WJ,Wallace CT,Watkins SC,Berger A,Paige CJ,Falo LD,Larregina AT PubMed Article URL:http://dx.doi.org/10.1016/j.celrep.2020.02.054</p>
	<p>15-0031 was used in Flow cytometry/Cell sorting to show how FOXO3A directs a protective autophagy program in haematopoietic stem cells.</p>
Mouse / Not Cited	<p>Nature (2013; 494: 323) "FOXO3A directs a protective autophagy program in haematopoietic stem cells." Author(s):Warr MR,Binnewies M,Flach J,Reynaud D,Garg T,Malhotra R,Debnath J,Passegué E PubMed Article URL:http://dx.doi.org/10.1038/nature11895</p>
	<p>International journal of oncology (2018; 53: 1580) "Intraperitoneal neutrophils activated by KRAS-induced ovarian cancer exert antitumor effects by modulating adaptive immunity." Author(s):Yoshida M,Taguchi A,Kawana K,Ogishima J,Adachi K,Kawata A,Nakamura H,Sato M,Fujimoto A,Inoue T,Tomio K,Mori M,Nagamatsu T,Arimoto T,Koga K,Hiraike OW,Oda K,Kiyono T,Osuga Y,Fujii T PubMed Article URL:http://dx.doi.org/10.3892/ijo.2018.4504</p>
	<p>15-0031 was used in Flow cytometry/Cell sorting to investigate the B cell subset responsible for the secretion of IgM in bone marrow and the spleen.</p>
Mouse / Not Cited	<p>European journal of immunology (2012; 42: 120) "B-1 cells in the bone marrow are a significant source of natural IgM." Author(s):Choi YS,Dieter JA,Rothaeusler K,Luo Z,Baumgarth N PubMed Article URL:http://dx.doi.org/10.1002/eji.201141890</p>

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	15-0031 was used in Flow cytometry/Cell sorting to identify mast cell progenitors in mice and investigate their timeline of commitment to the mast cell lineage.
Mouse / Not Cited	<p>Proceedings of the National Academy of Sciences of the United States of America (2005; 102: 11408)</p> <p>"Identification of mast cell progenitors in adult mice."</p> <p>Author(s):Chen CC,Grimbaldeston MA,Tsai M,Weissman IL,Galli SJ</p> <p>PubMed Article URL:http://dx.doi.org/10.1073/pnas.0504197102</p>
	15-0031 was used in Flow cytometry/Cell sorting to uncover a role of DNA-PKcs T2609 phosphorylation in promoting cNHEJ repair pathway choice during CSR.
Mouse / Not Cited	<p>Proceedings of the National Academy of Sciences of the United States of America (2020; 117: 22953)</p> <p>"DNA-PKcs phosphorylation at the T2609 cluster alters the repair pathway choice during immunoglobulin class switch recombination."</p> <p>Author(s):Crowe JL,Wang XS,Shao Z,Lee BJ,Estes VM,Zha S</p> <p>PubMed Article URL:http://dx.doi.org/10.1073/pnas.2007455117</p>
	15-0031-82 was used in Flow Cytometry to examine immune cells and cytokine profiles of Trichinella spiralis infected mice by Meso Scale Discovery (MSD) and flow cytometry.
Human / Not Cited	<p>Parasite (Paris, France) (2020; 26:)</p> <p>"Regulation of host immune cells and cytokine production induced by Trichinella spiralis infection."</p> <p>Author(s):Song Y,Xu J,Wang X,Yang Y,Bai X,Pang J,Wang X,Yu M,Liu M,Liu X,Sun S</p> <p>PubMed Article URL:http://dx.doi.org/10.1051/parasite/2019074</p>
	15-0031 was used in Flow cytometry/Cell sorting to explore a possible correlation between T cell activation and changes in emotional behavior in a multiple sclerosis mouse model.
Mouse / Not Cited	<p>Frontiers in immunology (2013; 4:)</p> <p>"Emotional change-associated T cell mobilization at the early stage of a mouse model of multiple sclerosis."</p> <p>Author(s):Piras G,Rattazzi L,McDermott A,Deacon R,D'Acquisto F</p> <p>PubMed Article URL:http://dx.doi.org/10.3389/fimmu.2013.00400</p>
	15-0031 was used in Flow cytometry/Cell sorting to provide insights into cellular and molecular mechanisms underlying the effects of sleep deprivation on HSCs.
Mouse / Not Cited	<p>Nature communications (2015; 6:)</p> <p>"Sleep disruption impairs haematopoietic stem cell transplantation in mice."</p> <p>Author(s):Rolls A,Pang WW,Ibarra I,Colas D,Bonnavion P,Korin B,Heller HC,Weissman IL,de Lecea L</p> <p>PubMed Article URL:http://dx.doi.org/10.1038/ncomms9516</p>
	15-0031 was used in Flow cytometry/Cell sorting to investigate the relative contribution of immunoglobulin-dependent effector pathways to anaphylactic responses to food.
Mouse / Not Cited	<p>The Journal of allergy and clinical immunology (2011; 127: 1552)</p> <p>"Distinct immune effector pathways contribute to the full expression of peanut-induced anaphylactic reactions in mice."</p> <p>Author(s):Arias K,Chu DK,Flader K,Botelho F,Walker T,Arias N,Humbles AA,Coyle AJ,Oettgen HC,Chang HD,Van Rooijen N,Waserman S,Jordana M</p> <p>PubMed Article URL:http://dx.doi.org/10.1016/j.jaci.2011.03.044</p>
	15-0031 was used in Flow cytometry/Cell sorting to show how the inhibition of tertiary lymphoid tissue may constitute a therapeutic approach for treating acute kidney injury in the elderly.
Mouse / Not Cited	<p>JCI insight (2016; 1:)</p> <p>"Heterogeneous fibroblasts underlie age-dependent tertiary lymphoid tissues in the kidney."</p> <p>Author(s):Sato Y,Mii A,Hamazaki Y,Fujita H,Nakata H,Masuda K,Nishiyama S,Shibuya S,Haga H,Ogawa O,Shimizu A,Narumiya S,Kaisho T,Arita M,Yanagisawa M,Miyasaka M,Sharma K,Minato N,Kawamoto H,Yanagita M</p> <p>PubMed Article URL:http://dx.doi.org/10.1172/jci.insight.87680</p>
	15-0031 was used in Flow cytometry/Cell sorting to compare the effects of the multicomponent LBSap vaccine with those of Leish-Tec® and Leishmune®.
Mouse / Not Cited	<p>Parasites & vectors (2016; 9:)</p> <p>"Multicomponent LBSap vaccine displays immunological and parasitological profiles similar to those of Leish-Tec® and Leishmune® vaccines against visceral leishmaniasis."</p> <p>Author(s):de Mendonça LZ,Resende LA,Lanna MF,Aguiar-Soares RD,Roatt BM,Castro RA,Batista MA,Silveira-Lemos D,Gomes Jde A,Fujiwara RT,Rezende SA,Martins-Filho OA,Corrêa-Oliveira R,Dutra WO,Reis AB,Giunchetti RC</p> <p>PubMed Article URL:http://dx.doi.org/10.1186/s13071-016-1752-6</p>

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	15-0031 was used in Flow cytometry/Cell sorting to suggest that combined therapy is a promising strategy for prevention of GVHD with preservation of graft-versus-leukemia in allogenic HSCT.
Mouse / Not Cited	Journal of immunology (Baltimore, Md. : 1950) (2014; 192: 1928) "Oral combined therapy with probiotics and alloantigen induces B cell-dependent long-lasting specific tolerance." Author(s):Mercadante AC,Perobelli SM,Alves AP,Gonçalves-Silva T,Mello W,Gomes-Santos AC,Miyoshi A,Azevedo V, Faria AM,Bonomo A PubMed Article URL: http://dx.doi.org/10.4049/jimmunol.1301034
	15-0031-82 was used in Flow cytometry/Cell sorting to indicate that RNA methylation controls symmetric commitment and cell identity of hematopoietic stem cells and may provide a general mechanism for how stem cells regulate differentiation fate choice.
Mouse / Not Cited	Cell reports (2019; 28: 1703) "m<sup>6</sup>A RNA Methylation Maintains Hematopoietic Stem Cell Identity and Symmetric Commitment." Author(s):Cheng Y,Luo H,Izzo F,Pickering BF,Nguyen D,Myers R,Schurer A,Gourkanti S,Brüning JC,Vu LP,Jaffrey SR, Landau DA,Kharas MG PubMed Article URL: http://dx.doi.org/10.1016/j.celrep.2019.07.032
	15-0031 was used in Flow cytometry/Cell sorting to investigate the mechanisms controlling differentiation and plasticity of CD4+ T cells in the gut of mice.
Mouse / Not Cited	PLoS computational biology (2013; 9:) "Systems modeling of molecular mechanisms controlling cytokine-driven CD4+ T cell differentiation and phenotype plasticity." Author(s):Carbo A,Hontecillas R,Kronsteiner B,Viladomiu M,Pedragosa M,Lu P,Philipson CW,Hoops S,Marathe M, Eubank S,Bisset K,Wendelsdorf K,Jarrah A,Mei Y,Bassaganya-Riera J PubMed Article URL: http://dx.doi.org/10.1371/journal.pcbi.1003027
	15-0031-82 was used in flow cytometry to investigate erythroid miRNA biogenesis in mammalian slicing.
Mouse / Not Cited	Molecular cell (2018; 69: 265) "Dual Strategies for Argonaute2-Mediated Biogenesis of Erythroid miRNAs Underlie Conserved Requirements for Slicing in Mammals." Author(s):Jee D,Yang JS,Park SM,Farmer DT,Wen J,Chou T,Chow A,McManus MT,Kharas MG,Lai EC PubMed Article URL: http://dx.doi.org/10.1016/j.molcel.2017.12.027
	15-0031 was used in Flow cytometry/Cell sorting to report that N-cad+ cells were functional bone and marrow stromal progenitor cells, giving rise to osteoblasts, adipocytes, and chondrocytes both in vitro and in vivo.
Mouse / Not Cited	Cell reports (2019; 26: 652) "N-Cadherin-Expressing Bone and Marrow Stromal Progenitor Cells Maintain Reserve Hematopoietic Stem Cells." Author(s):Zhao M,Tao F,Venkatraman A,Li Z,Smith SE,Unruh J,Chen S,Ward C,Qian P,Perry JM,Marshall H,Wang J,He XC,Li L PubMed Article URL: http://dx.doi.org/10.1016/j.celrep.2018.12.093
	15-0031 was used in Flow cytometry/Cell sorting to report a novel radioprotector drug, a liposomal formulation of gamma-tocotrienol (GT3), or GT3-Nano for short, to mitigate bone marrow radiation damage during targeted radionuclide therapy (TRT).
Mouse / Not Cited	Journal of nuclear medicine : official publication, Society of Nuclear Medicine (2021; 62: 584) "-Tocotrienol-Loaded Liposomes for Radioprotection from Hematopoietic Side Effects Caused by Radiotherapeutic Drugs." Author(s):Lee SG,Kalidindi TM,Lou H,Gangangari K,Punzalan B,Bitton A,Lee CJ,Vargas HA,Park S,Bodei L,Kharas MG, Singh VK,Kishore Pillarsetty NV,Larson SM PubMed Article URL: http://dx.doi.org/10.2967/jnumed.120.244681
	15-0031 was used in Flow cytometry/Cell sorting to study changes in the expression of EPHB4 and EFNB2 by natural killer cells during spiral arterial modification.
Mouse / Not Cited	Biology of reproduction (2008; 79: 450) "Dynamic changes occur in patterns of endometrial EFNB2/EPHB4 expression during the period of spiral arterial modification in mice." Author(s):Zhang J,Dong H,Wang B,Zhu S,Croy BA PubMed Article URL: http://dx.doi.org/10.1095/biolreprod.108.067975

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	<p>15-0031 was used in Flow cytometry/Cell sorting to globally map the mRNA targets of the RBP MSI2 in mammalian adult normal and malignant stem cells.</p>
Mouse / Not Cited	<p>Nature communications (2020; 11:) "HyperTRIBE uncovers increased MUSASHI-2 RNA binding activity and differential regulation in leukemic stem cells." Author(s):Nguyen DTT,Lu Y,Chu KL,Yang X,Park SM,Choo ZN,Chin CR,Prieto C,Schurer A,Barin E,Savino AM,Gourkanti S,Patel P,Vu LP,Leslie CS,Kharas MG PubMed Article URL:http://dx.doi.org/10.1038/s41467-020-15814-8</p>
Mouse / Not Cited	<p>15-0031 was used in Flow cytometry/Cell sorting to investigate how the expression and function of JAB1 are critical for the proliferation and maintenance of hematopoietic progenitors.</p> <p>The Journal of biological chemistry (2008; 283: 29011) "Stable form of JAB1 enhances proliferation and maintenance of hematopoietic progenitors." Author(s):Mori M,Yoneda-Kato N,Yoshida A,Kato JY PubMed Article URL:http://dx.doi.org/10.1074/jbc.M804539200</p>
Mouse / Not Cited	<p>15-0031 was used in Flow cytometry/Cell sorting to report the induction of IL-10-driven regulatory responses mediated by CD11b+F4/80hiCD64+CX3CR1+ MNP that contribute to maintaining high levels of Helicobacter pylori loads in the stomach by modulating effector T cell responses at the gastric mucosa.</p> <p>Journal of immunology (Baltimore, Md. : 1950) (2017; 198: 3195) "Cooperation of Gastric Mononuclear Phagocytes with <i>Helicobacter pylori</i> during Colonization." Author(s):Viladomiu M,Bassaganya-Riera J,Tubau-Juni N,Kronsteiner B,Leber A,Philipson CW,Zoccoli-Rodriguez V,Hontecillas R PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1601902</p>
Mouse / Not Cited	<p>15-0031 was used in Flow cytometry/Cell sorting to study the role of GATA-3 in regulating the self-renewal of long-term haematopoietic stem cells.</p> <p>Nature immunology (2013; 14: 1037) "GATA-3 regulates the self-renewal of long-term hematopoietic stem cells." Author(s):Frelin C,Herrington R,Janmohamed S,Barbara M,Tran G,Paige CJ,Benveniste P,Zuñiga-Pflücker JC,Souabni A,Busslinger M,Iscove NN PubMed Article URL:http://dx.doi.org/10.1038/ni.2692</p>
Mouse / Not Cited	<p>15-0031-82 was used in Flow Cytometry to show that radiation can induce phosphorylation of murine DNA-PKcs at the corresponding S2053.</p> <p>Journal of immunology (Baltimore, Md. : 1950) (2019; 203: 178) "Phosphorylation at S2053 in Murine (S2056 in Human) DNA-PKcs Is Dispensable for Lymphocyte Development and Class Switch Recombination." Author(s):Jiang W,Estes VM,Wang XS,Shao Z,Lee BJ,Lin X,Crowe JL,Zha S PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1801657</p>
Mouse / Not Cited	<p>15-0031 was used in Flow cytometry/Cell sorting to investigate when IL-7 stimulation is necessary in hemato-/lymphopoiesis in adult mice, showing that IL-7 specifies B cell fate at the common lymphoid progenitor to pre-proB transition stage by maintaining early B cell factor expression.</p> <p>Journal of immunology (Baltimore, Md. : 1950) (2008; 181: 383) "IL-7 specifies B cell fate at the common lymphoid progenitor to pre-proB transition stage by maintaining early B cell factor expression." Author(s):Kikuchi K,Kasai H,Watanabe A,Lai AY,Kondo M PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.181.1.383</p>
Mouse / Not Cited	<p>15-0031 was used in Flow cytometry/Cell sorting to reveal fundamental differences in the response regulation of B-1 and B-2 cells during an infection.</p> <p>The Journal of experimental medicine (2008; 205: 3053) "Dual role for B-1a cells in immunity to influenza virus infection." Author(s):Choi YS,Baumgarth N PubMed Article URL:http://dx.doi.org/10.1084/jem.20080979</p>
Mouse / Not Cited	<p>15-0031 was used in Flow cytometry/Cell sorting to demonstrate the importance of maintaining unperturbed cerebral blood flow while studying brain metastasis and interactions with stress and inflammatory responses.</p> <p>Brain, behavior, and immunity (2017; 62: 265) "Maintaining unperturbed cerebral blood flow is key in the study of brain metastasis and its interactions with stress and inflammatory responses." Author(s):Benbenishty A,Segev-Amzaleg N,Shaashua L,Melamed R,Ben-Eliyahu S,Blinder P PubMed Article URL:http://dx.doi.org/10.1016/j.bbi.2017.02.012</p>

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	15-0031 was used in Flow cytometry/Cell sorting to demonstrate how CARM1 is a key epigenetic regulator of hematopoiesis that affects multiple lineages at various stages of differentiation.
Mouse / Not Cited	Journal of immunology (Baltimore, Md. : 1950) (2013; 190: 597) "Coactivator-associated arginine methyltransferase 1 regulates fetal hematopoiesis and thymocyte development." Author(s):Li J,Zhao Z,Carter C,Ehrlich LI,Bedford MT,Richie ER PubMed Article URL: http://dx.doi.org/10.4049/jimmunol.1102513
	15-0031 was used in Flow cytometry/Cell sorting to investigate the effect of oral administration of Bifidobacterium on tumours.
Mouse / Not Cited	Molecular therapy : the journal of the American Society of Gene Therapy (2010; 18: 1397) "Orally administered bifidobacteria as vehicles for delivery of agents to systemic tumors." Author(s):Cronin M,Morrissey D,Rajendran S,El Mashad SM,van Sinderen D,O'Sullivan GC,Tangney M PubMed Article URL: http://dx.doi.org/10.1038/mt.2010.59
	15-0031 was used in Flow cytometry/Cell sorting to investigate how CD4+ T-cells and other immune cell subsets are distributed in the gut mucosa during Helicobacter pylori infection.
Mouse / Not Cited	PloS one (2014; 8:) "Predictive computational modeling of the mucosal immune responses during Helicobacter pylori infection." Author(s):Carbo A,Bassaganya-Riera J,Pedragosa M,Viladomiu M,Marathe M,Eubank S,Wendelsdorf K,Bisset K,Hoops S, Deng X,Alam M,Kronsteiner B,Mei Y,Hontecillas R PubMed Article URL: http://dx.doi.org/10.1371/journal.pone.0073365

2 Immunohistochemistry (Frozen) References	
Species / Dilution	Summary
Not Applicable / Not Cited	International journal of cancer (2006; 118: 2657) "HSP70 vaccine in combination with gene therapy with plasmid DNA encoding sPD-1 overcomes immune resistance and suppresses the progression of pulmonary metastatic melanoma." Author(s):Geng H,Zhang GM,Xiao H,Yuan Y,Li D,Zhang H,Qiu H,He YF,Feng ZH PubMed Article URL: http://dx.doi.org/10.1002/ijc.21795
Not Applicable / Not Cited	Investigative ophthalmology & visual science (2005; 46: 3753) "CCR5-deficient mice develop experimental autoimmune uveoretinitis in the context of a deviant effector response." Author(s):Takeuchi A,Usui Y,Takeuchi M,Hattori T,Kezuka T,Suzuki J,Okunuki Y,Iwasaki T,Haino M,Matsushima K,Usui M PubMed Article URL: http://dx.doi.org/10.1167/iovs.04-1429

1 Functional Assay References	
Species / Dilution	Summary
Not Applicable / Not Cited	Journal of immunology (Baltimore, Md. : 1950) (2005; 175: 6420) "Functional analysis of B and T lymphocyte attenuator engagement on CD4+ and CD8+ T cells." Author(s):Krieg C,Han P,Stone R,Goularte OD,Kaye J PubMed Article URL: http://dx.doi.org/10.4049/jimmunol.175.10.6420