IFN gamma Monoclonal Antibody (XMG1.2), PE, eBioscience™

Product data sheet

Catalog Number: 12-7311-82

Details

| Size | 100 µg |
| Host/Isotope | Rat / lgG1, kappa |
| Class | Monoclonal |
| Type | Antibody |
| Clone | XMG1.2 |
| Conjugate | PE |
| Form | Liquid |
| Concentration | 0.2 mg/mL |
| Purification | Affinity chromatography |
| Storage buffer | PBS, pH 7.2, with 0.1% gelatin |
| Contains | 0.09% sodium azide |
| Storage Conditions | 4°C, store in dark, DO NOT FREEZE! |

Species Reactivity

- Tested species reactivity: Mouse
- Published species reactivity: Mouse, Not Applicable

Tested Applications

- Flow Cytometry (Flow): Dilution * 0.25 µg/test

Published Applications

- Flow Cytometry (Flow): See 57 publications below
- Immunocytochemistry (ICC): See 1 publications below
- ELISA (ELISA): See 2 publications below
- Immunofluorescence (IF): See 3 publications below
- Miscellaneous PubMed (MISC): See 4 publications below
- Functional Assay (FN): See 1 publications below
- Neutralization (Neu): See 1 publications below

Tested Applications

* 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 XMG1.2 antibody reacts with mouse interferon (IFN) gamma. The XMG1.2 antibody is a neutralizing antibody. Mouse IFN gamma is a 20 kDa factor produced by activated T, B and NK cells, and is an anti-viral and anti-parasitic cytokine. IFN gamma, in synergy with other cytokines such as TNF alpha, inhibits proliferation of normal and transformed cells. Immunomodulatory effects of IFN gamma are exerted on a wide range of cell types expressing the high affinity receptors for IFN gamma. Glycosylation of IFN gamma does not affect its biological activity.

Applications Reported: This XMG1.2 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested: This XMG1.2 antibody has been tested by intracellular staining and flow cytometric analysis of stimulated mouse splenocytes using the Intracellular Fixation and Permeabilization Buffer Set (cat. 88-8824) and protocol. Please refer to Best Protocols: Protocol A: Two step protocol for (cytoplasmic) intracellular proteins located under the Resources Tab online. 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 10^6 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.


Filtration: 0.2 µm post-manufacturing filtered.

Background/Target Information

IFN gamma, also called Type II interferon, macrophage activation factor, and immune interferon is produced primarily by T-lymphocytes and natural killer cells in response to antigens, mitogens, Staphylococcus enterotoxin B, phytohemaglutanin and other cytokines. IFN gamma is a glycoprotein that exists, functionally, as a homodimer of approximately 45 kDa. On SDS-PAGE it appears as a combination of 25, 20 and minor 15.5 kDa bands as a result of differential glycosylation. The biological activity of the IFN gamma homodimer is highly species specific and includes the following: antiviral activity, tumor antiproliferative activity, induction of class I and II MHC, macrophage activation, and enhanced immunoglobulin secretion by B lymphocytes. IFNg is involved in cytokine regulation and also acts synergistically with other cytokines.

Intracellular staining of stimulated mouse splenocytes. As expected based on known expression patterns, IFN gamma clone XMG1.2 stains a minor subset of CD4+ T cells and a larger subset of NK1.1+ NK cells with no staining observed without stimulation. Details: Mouse splenocytes were cultured in the presence of Protein Transport Inhibitors (500X) (Unstimulated, bottom row) or Cell Stimulation Cocktail (plus protein transport inhibitors, 500X) for 5 hours (Stimulated, top row). Cells were fixed and permeabilized with the IC Fixation and Permeabilization Buffer Set and protocol followed by intracellular staining with CD4 (clone RM4-5), NK1.1 (clone PK136) and IFN gamma (clone XMG1.2). Cells in the CD4+ (blue histogram) or NK1.1+ (purple histogram) gates were used for analysis. Cell Treatment validation info.

### IFN gamma Antibody (12-7311-82) in Flow

Mouse splenocytes were stimulated with Con A for 2 days then restimulated with Cell Stimulation Cocktail (plus protein transport inhibitors) (Product # 00-4975-03) for 5 hours. Cells were then surface stained with Anti-Mouse CD4 eFluor® 450 (Product # 48-0042-82) followed by intracellular staining with 0.125 µg of Rat IgG2a K Isotype Control PE (Product # 12-4301-82) (left) or 0.125 µg of Anti-Mouse IFN gamma PE (right) using the Intracellular Fixation and Permeabilization Buffer Set (Product # 88-8824-00) and protocol. Total viable cells, as determined by Fixable Viability Dye eFluor® 506 (Product # 65-0866-14), were used for analysis.
57 Flow Cytometry References

Species / Dilution | Summary
---|---
Mouse / Not Cited | 12-7311 was used in Flow cytometry/Cell sorting to suggest that targeting antigens to FcRs on DCs may be a promising approach to raise immunogenic or tolerogenic T cell responses to antigens of choice.

The Journal of experimental medicine (May 2017; 214: 1509)
“DC subset-specific induction of T cell responses upon antigen uptake via Fc receptors in vivo.”
PubMed Article URL: http://dx.doi.org/10.1084/jem.20160951

Mouse / Not Cited | 12-7311 was used in Flow cytometry/Cell sorting to test the influence of host and donor microbiota on skin transplant rejection.

The Journal of clinical investigation (Jul 2016; 126: 2736)
“The composition of the microbiota modulates allograft rejection.”
PubMed Article URL: http://dx.doi.org/10.1172/JCI85295

Mouse / Not Cited | 12-7311 was used in Flow cytometry/Cell sorting to study the co-stimulatory role of CXCR6/CXCL16 interactions in glycolipid-dependent invariant natural killer T (iNKT) cell activation and tumour control, showing that CXCL16-positive dendritic cells enhance iNKT cell-dependent IFN production and tumor control.

Oncoimmunology (Jun 2016; 5: null)
“CXCL16-positive dendritic cells enhance invariant natural killer T cell-dependent IFN production and tumor control.”
Author(s): Veinotte L, Gembreskes S, Johnston B
PubMed Article URL: http://dx.doi.org/10.1080/2162402X.2016.1160979

Mouse / 1:100 | 12-7311 was used in Flow cytometry/Cell sorting to determine the relative role and mechanism of action of estrogen receptor alpha and beta in myocarditis susceptibility.

Journal of clinical and cellular immunology (Feb 2016; 6: 1)
“ER and ER Differentially Regulate NKT and V4(+) T-cell Activation and T-regulatory Cell Response in Coxsackievirus B3 Infected Mice.”
Author(s): Huber S
PubMed Article URL: http://dx.doi.org/10.4172/2155-9899.1000372

Mouse / Not Cited | 12-7311 was used in Flow cytometry/Cell sorting to represent a step forward towards the goal of achieving remote and wireless control of Ca(2+)-modulated activities with tailored function.

eLife (Dec 2015; 4: null)
“Near-infrared photoactivatable control of Ca(2+)-signaling and optogenetic immunomodulation.”
PubMed Article URL: http://dx.doi.org/10.7554/eLife.10024

Mouse / Not Cited | 12-7311 was used in Flow cytometry/Cell sorting to define the contribution of DCs to T cell-independent innate defence in immune-privileged CNS upon infection with neurotropic viruses.

Scientific reports (Dec 2015; 5: null)
“CD11c(hi) Dendritic Cells Regulate Ly-6C(hi) Monocyte Differentiation to Preserve Immune-privileged CNS in Lethal Neuroinflammation.”
Author(s): Kim JH, Choi JY, Kim SB, Uyangaa E, Patil AM, Han YW, Park SY, Lee JH, Kim K, Eo SK
PubMed Article URL: http://dx.doi.org/10.1038/srep17548

Mouse / Not Cited | 12-7311 was used in Flow cytometry/Cell sorting to investigate the role of MK2 in dendritic cells, showing that it attenuates dendritic cell-mediated Th1 differentiation and autoimmune encephalomyelitis.

“The MAPK-Activated Kinase MK2 Attenuates Dendritic Cell-Mediated Th1 Differentiation and Autoimmune Encephalomyelitis.”
PubMed Article URL: http://dx.doi.org/10.4049/jimmunol.1401663


Thermo Fisher Scientific
10255 Science Center Drive
San Diego, CA 92121
12-7311 was used in Flow cytometry/Cell sorting to study how the activities of APCs were significantly lower in mice immunised with HBsAg vaccine, resulting in an inferior activation of HBsAg-specific Th cells.

Mouse / Not Cited
Human vaccines and immunotherapeutics (Jul 2015; 11: 1735)
"Inadequate activation of the HBsAg-specific Th cells by APCs leads to hyporesponsiveness to HBsAg vaccine in B10.S mice."
PubMed Article URL:http://dx.doi.org/10.1080/21645515.2015.1048408

Mouse / Not Cited
12-7311 was used in Flow cytometry/Cell sorting to investigate how insertion of microRNA-targeted sequences into replication-incompetent adenovirus vector genomes can suppress leaky expression of adenoviral genes.

Mouse / Not Cited
Molecular therapy. Methods and clinical development (May 2015; 1: null)
"Suppression of leaky expression of adenovirus genes by insertion of microRNA-targeted sequences in the replication-incompetent adenovirus vector genome."
PubMed Article URL:http://dx.doi.org/10.1038/mtm.2014.35

Mouse / Not Cited
12-7311 was used in Flow cytometry/Cell sorting to investigate the local and abscopal effects of targeting the CTLA-4 T cell inhibitory receptor in a murine mesothelioma model.

Mouse / Not Cited
Oncotarget (May 2015; 6: 12468)
"Targeting the inhibitory receptor CTLA-4 on T cells increases abscopal effects in murine mesothelioma model."
Author(s): Wu L,Wu MC,De la Maza L,Yun Z,Yu J,Zhao Y,Cho J,de Perrot M
PubMed Article URL:http://dx.doi.org/10.18632/oncotarget.3487

Mouse / Not Cited
12-7311 was used in Flow cytometry/Cell sorting to investigate the roles of TLR2 and TLR9 in regulating innate immunity against oral infection of Salmonella enterica serovar Typhimurium in mice.

Mouse / Not Cited
Infection and immunity (Apr 2015; 83: 1641)
"Toll-Like receptor 2 (TLR2) and TLR9 play opposing roles in host innate immunity against Salmonella enterica serovar Typhimurium infection."
Author(s): Zhan R, Han Q, Zhang C, Tian Z, Zhang J
PubMed Article URL:http://dx.doi.org/10.1128/IAI.02870-14

Mouse / Not Cited
12-7311 was used in Flow cytometry/Cell sorting to investigate the phenotype of spinal cord-infiltrating CD4+ T lymphocytes involved in the maintenance of neuropathic pain in a murine model.

Mouse / Not Cited
Journal of pain and relief (Jun 2014; Suppl 3: null)
"Phenotypic Identification of Spinal Cord-Infiltrating CD4(+) T Lymphocytes in a Murine Model of Neuropathic Pain."
Author(s): Draleau K, Maddula S, Slaiby A, Nuttle-McMeneny N, De Leo J, Cao L
PubMed Article URL:http://dx.doi.org/10.4172/2167-0846.S3-003

Mouse / Not Cited
12-7311 was used in Flow cytometry/Cell sorting to investigate the involvement of T cells in the progression to heart failure using a transverse aortic constriction (TAC) model.

Mouse / Not Cited
Circulation (May 2014; 129: 2111)
"CD4+ T cells promote the transition from hypertrophy to heart failure during chronic pressure overload."
Author(s): Laroumanie F, Douin-Echinard V, Pozzo J, Laires O, Tortosa F, Vinel C, Delage C, Calise D, Dutaur M, Parini A, Pizzinat N
PubMed Article URL:http://dx.doi.org/10.1161/CIRCULATIONAHA.113.007101

Mouse / Not Cited
12-7311 was used in Flow cytometry/Cell sorting to reveal a previously unappreciated role for helminth-induced IL-4 in impairment of iNKT cell-mediated clearance of bacterial coexposure.

Mouse / Not Cited
Infection and immunity (May 2014; 82: 2087)
"Helminth-induced interleukin-4 abrogates invariant natural killer T cell activation-associated clearance of bacterial infection."
Author(s): Hsieh YJ, Fu CL, Hsieh MH
PubMed Article URL:http://dx.doi.org/10.1128/IAI.02870-14

Mouse / Not Cited
12-7311 was used in Flow cytometry/Cell sorting to investigate the role of dendritic cells in neutrophil homeostasis, showing a central role in regulation of bone marrow release and survival of neutrophils.

Mouse / Not Cited
Journal of immunology (Baltimore, Md. : 1950) (Apr 2014; 192: 3374)
"Central role of conventional dendritic cells in regulation of bone marrow release and survival of neutrophils."
PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1300237

Molecular and cellular biology (Mar 2014; 34: 820)
"Immunosuppression by N-methyl-D-aspartate receptor antagonists is mediated through inhibition of Kv1.3 and KCa3.1 channels in T-cells."
PubMed Article URL:http://dx.doi.org/10.1128/MCB.01273-13

Human vaccines and immunotherapeutics (Oct 2013; 9: 2133)
"Interleukin-22 as a molecular adjuvant facilitates IL-17-producing CD8+ T cell responses against a HBV DNA vaccine in mice."
Author(s): Wu B, Zou Q, Hu Y, Wang B
PubMed Article URL:http://dx.doi.org/10.1161/hv.2012

American journal of physiology. Gastrointestinal and liver physiology (Sep 2013; 305: G427)
"Glucocorticoid receptor-dependent immunomodulatory effect of ursodeoxycholic acid on liver lymphocytes in mice." Author(s): Takigawa T, Miyazaki H, Kinoshita M, Kawarabayashi N, Nishiyama K, Hatsuse K, Ono S, Saitoh D, Seki S, Yamamoto J
PubMed Article URL:http://dx.doi.org/10.1152/ajpgi.00205.2012

American journal of physiology. Gastrointestinal and liver physiology (Sep 2013; 305: G427)
"Glucocorticoid receptor-dependent immunomodulatory effect of ursodeoxycholic acid on liver lymphocytes in mice." Author(s): Takigawa T, Miyazaki H, Kinoshita M, Kawarabayashi N, Nishiyama K, Hatsuse K, Ono S, Saitoh D, Seki S, Yamamoto J
PubMed Article URL:http://dx.doi.org/10.1152/ajpgi.00205.2012

Diabetes (Sep 2013; 62: 3132)
"Protection of islet grafts through transforming growth factor--induced tolerogenic dendritic cells."
Author(s): Thomas DC, Wong FS, Zaccone P, Green EA, Wallberg M
PubMed Article URL:http://dx.doi.org/10.2337/db12-1740

"Thymic stromal lymphopoietin attenuates the development of atherosclerosis in ApoE-/- mice."
PubMed Article URL:http://dx.doi.org/10.1161/JAHA.113.000391

"Delayed anti-CD3 therapy results in depletion of alloreactive T cells and the dominance of Foxp3+ CD4+ graft infiltrating cells."
Author(s): Goto R, You S, Zaitsev M, Chatenoud L, Wood KJ
PubMed Article URL:http://dx.doi.org/10.1111/ajt.12272

Journal of immunology (Baltimore, Md. : 1950) (Jun 2013; 190: 6269)
"Markers of nonselective and specific NK cell activation."
Author(s): Fogel LA, Sun MM, Geurs TL, Carayannopoulos LN, French AR
PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1202533
12-7311 was used in Flow cytometry/Cell sorting to identify a unique function for gV-sPLA2 in the activation and recruitment of immune cells.

Mouse / Not Cited

Journal of immunology (Baltimore, Md. : 1950) (Jun 2013; 190: 5927)
"Group V secretory phospholipase A2 is involved in macrophage activation and is sufficient for macrophage effector functions in allergic pulmonary inflammation."
Author(s):Ohta S,Imamura M,Xing W,Boyce JA,Balestrieri B
PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1203202

12-7311 was used in Flow cytometry/Cell sorting to elucidate the role of LSECtin in pathogenesis of viral infection, showing that its absence led to increased frequency in intrathecal CTLs, leading to accelerated liver adenovirus clearance.

Mouse / Not Cited

"Liver sinusoidal endothelial cell lectin CTL-dependent virus clearance in mouse models of viral hepatitis."
PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1203091

12-7311 was used in Flow cytometry/Cell sorting to study how RBCs of LMP7-deficient mice were more likely to deform in response to infection with malaria parasites.

Mouse / Not Cited

Journal of immunology (Baltimore, Md. : 1950) (May 2012; 189: 2890)
"IFN-γ production by allogeneic Foxp3+ regulatory T cells is essential for preventing experimental graft-versus-host disease."
PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1200413

12-7311 was used in Flow cytometry/Cell sorting to show that CD28 signals are required for IL-2-mediated survival and proliferation of both CD27(+) and CD27(-) T cell subsets.

Mouse / Not Cited

"B7-CD28 costimulatory signals control the survival and proliferation of murine and human T cells via IL-2 production."
Author(s):Ribot JC,Debarros A,Mancio-Silva L,Pampalona A,Silva-Santos B
PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1200268

12-7311 was used in Flow cytometry/Cell sorting to study the role of TLR1 in TH17 cell responses during Yersinia enterocolitica infection.

Mouse / Not Cited

The Journal of experimental medicine (Jul 2012; 209: 1437)
"A specific role for TLR1 in protective T(H)17 immunity during mucosal infection."
Author(s):DePaolo RW,Kamdar K,Khakpour S,Sugiura Y,Wang W,Jabri B
PubMed Article URL:http://dx.doi.org/10.1084/jem.20112339

12-7311 was used in Flow cytometry/Cell sorting to demonstrate that regulation of JNK phosphorylation plays a central role in Treg cell function.

Mouse / Not Cited

The Journal of biological chemistry (May 2012; 287: 17100)
"Loss of T regulatory cell suppression following signaling through glucocorticoid-induced tumor necrosis receptor (GITR) is dependent on c-Jun N-terminal kinase activation."
Author(s):Joetham A,Ohnishi H,Okamoto M,Takeda K,Schedel M,Domenico J,Dakhama A,Gelfand EW
PubMed Article URL:http://dx.doi.org/10.1074/jbc.M111.316943

12-7311 was used in Flow cytometry/Cell sorting to investigate the epigenetic effects of trichloroethylene exposure on the activation state of CD4+ T cells.

Mouse / Not Cited

Toxical sciences : an official journal of the Society of Toxicology (May 2012; 127: 169)
"Epigenetic alterations may regulate temporary reversal of CD4(+) T cell activation caused by trichloroethylene exposure."
Author(s):Gilbert KM,Nelson AR,Cooney CA,Reisfeld B,Blossom SJ
PubMed Article URL:http://dx.doi.org/10.1093/toxsci/kfs093
**Journal of Immunology (Baltimore, Md.: 1950)** (May 2012; 188: 4171)

"Requirement for diverse TCR specificities determines regulatory T cell activity in a mouse model of autoimmune arthritis."

Author(s): Oh S,Aitken M,Simons DM,Basehoar A,Garcia V,Kroep E,Caton AJ

PubMed Article URL: http://dx.doi.org/10.4049/jimmunol.1103598

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**Immunology and cell biology** (Apr 2012; 90: 396)

"CD4 T cells play important roles in maintaining IL-17-producing T-cell subsets in naive animals."

Author(s): Do JS,Vipersas A,O'Brien RL,Min B

PubMed Article URL: http://dx.doi.org/10.1038/icb.2011.50

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**Vaccine** (Feb 2012; 30: 1445)

"Evaluation of Lassa virus vaccine immunogenicity in a CBA/J-ML29 mouse model."

Author(s): Goicochea MA,Zapata JC,Bryant J,Davis H,Salvato MS,Lukashevich IS


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**American Journal of Respiratory and Critical Care Medicine** (May 2011; 183: 1391)

"Interferon-α production by neutrophils during bacterial pneumonia in mice."

Author(s): Yamada M,Gomez JC,Chugh PE,Lowell CA,Dinauer MC,Dittmer DP,Doerschuk CM

PubMed Article URL: http://dx.doi.org/10.1111/j.1365-3024.2010.01268.x

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**Parasite Immunology** (Mar 2011; 33: 170)

"The magnitude of CD4(+) T-cell activation rather than TCR diversity determines the outcome of Leishmania infection in mice."

Author(s): Xin L,Wanderley JL,Wang Y,Vargas-Inchaustegui DA,Soong L

PubMed Article URL: http://dx.doi.org/10.1111/j.1365-3024.2010.01268.x

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**Immunology and Cell Biology** (Apr 2012; 90: 396)

"Synergistic antitumor effects of regulatory T cell blockade combined with pemetrexed in murine malignant mesothelioma."

Author(s): Anraku M,Tagawa T,Wu L,Yun Z,Keshavjee S,Zhang L,Johnston MR,de Perrot M

PubMed Article URL: http://dx.doi.org/10.1038/icb.2011.50

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**Journal of Immunology (Baltimore, Md. : 1950)** (Oct 2010; 185: 4714)

"PIPKI gamma 90 negatively regulates LFA-1-mediated adhesion and activation in antigen-induced CD4+ T cells."

Author(s): Wernimont SA,Legate KR,Simonson WT,Fassler R,Huttenlocher A

PubMed Article URL: http://dx.doi.org/10.4049/jimmunol.1001445

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**Immunology and Cell Biology** (May 2010; 90: 396)

"Synergistic antitumor effects of regulatory T cell blockade combined with pemetrexed in murine malignant mesothelioma."

Author(s): Annaru M,Tagawa T,Wu L,Yun Z,Keshavjee S,Zhang L,Johnston MR,de Perrot M

PubMed Article URL: http://dx.doi.org/10.4049/jimmunol.0900437

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**Journal of Immunology (Baltimore, Md. : 1950)** (May 2012; 188: 4171)

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Author(s): Oh S,Aitken M,Simons DM,Basehoar A,Garcia V,Kroep E,Caton AJ

PubMed Article URL: http://dx.doi.org/10.4049/jimmunol.1103598

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PubMed Article URL: http://dx.doi.org/10.1038/icb.2011.50

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Author(s): Goicochea MA,Zapata JC,Bryant J,Davis H,Salvato MS,Lukashevich IS


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**American Journal of Respiratory and Critical Care Medicine** (May 2011; 183: 1391)

"Interferon-α production by neutrophils during bacterial pneumonia in mice."

Author(s): Yamada M,Gomez JC,Chugh PE,Lowell CA,Dinauer MC,Dittmer DP,Doerschuk CM

PubMed Article URL: http://dx.doi.org/10.1111/j.1365-3024.2010.01268.x

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**Parasite Immunology** (Mar 2011; 33: 170)

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Author(s): Xin L,Wanderley JL,Wang Y,Vargas-Inchaustegui DA,Soong L

PubMed Article URL: http://dx.doi.org/10.1111/j.1365-3024.2010.01268.x

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**Immunology and Cell Biology** (May 2010; 90: 396)

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Author(s): Annaru M,Tagawa T,Wu L,Yun Z,Keshavjee S,Zhang L,Johnston MR,de Perrot M

PubMed Article URL: http://dx.doi.org/10.4049/jimmunol.0900437

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**Journal of Immunology (Baltimore, Md. : 1950)** (Oct 2010; 185: 4714)

"PIPKI gamma 90 negatively regulates LFA-1-mediated adhesion and activation in antigen-induced CD4+ T cells."

Author(s): Wernimont SA,Legate KR,Simonson WT,Fassler R,Huttenlocher A

PubMed Article URL: http://dx.doi.org/10.4049/jimmunol.1001445

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**Immunology and cell biology** (Apr 2012; 90: 396)

"CD4 T cells play important roles in maintaining IL-17-producing T-cell subsets in naive animals."

Author(s): Do JS,Vipersas A,O'Brien RL,Min B

PubMed Article URL: http://dx.doi.org/10.1038/icb.2011.50

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**Vaccine** (Feb 2012; 30: 1445)

"Evaluation of Lassa virus vaccine immunogenicity in a CBA/J-ML29 mouse model."

Author(s): Goicochea MA,Zapata JC,Bryant J,Davis H,Salvato MS,Lukashevich IS


12-7311 was used in Flow cytometry/Cell sorting to elucidate the mechanism of PUVA for treatment of psoriasis, showing that inhibition of the IL-23/Th17 axis and induction of Foxp3+ regulatory T cells involves CTLA4 signalling.

Mouse / Not Cited

Journal of immunology (Baltimore, Md. : 1950) (Jun 2010; 184: 7257)
"8-methoxypsoralen plus ultraviolet A therapy acts via inhibition of the IL-23/Th17 axis and induction of Foxp3+ regulatory T cells involving CTLA4 signaling in a psoriasis-like skin disorder."
PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.0903719

12-7311 was used in Flow cytometry/Cell sorting to study how CXCL10(-/-) mice are more susceptible than wild-type mice to dengue virus infection.

Mouse / Not Cited

"Resistance to dengue virus infection in mice is potentiated by CXCL10 and is independent of CXCL10-mediated leukocyte recruitment."
Author(s):Ip PP, Liao F
PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.0903484

12-7311 was used in Flow cytometry/Cell sorting to investigate the mechanisms underlying the generation of gammadelta T cells, showing that it occurs via a TGF-beta 1-dependent mechanism.

Mouse / Not Cited

Journal of immunology (Baltimore, Md. : 1950) (Feb 2010; 184: 1675)
"Cutting edge: spontaneous development of IL-17-producing gamma delta T cells in the thymus occurs via a TGF-beta 1-dependent mechanism."
Author(s):Do JS, Fink J P, Li L, Spolski R, Robinson J, Leonard W J, Letterio J J, Min B
PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.0903539

12-7311 was used in Flow cytometry/Cell sorting to determine the mechanisms that chNKG2D T cells require to induce host immunity against ovarian tumours and which of the host immune cells are involved in tumour elimination.

Mouse / Not Cited

"Chimeric NKG2D T cells require both T cell- and host-derived cytokine secretion and perforin expression to increase tumor antigen presentation and systemic immunity."
Author(s):Barber A, Sentman CL
PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.0900721

12-7311 was used in Flow cytometry/Cell sorting to study the role of T reg cells in the induction of resistance to EAE and long term acceptance of islet allografts.

Mouse / Not Cited

The Journal of experimental medicine (Apr 2009; 206: 751)
"In vivo expansion of T reg cells with IL-2-mAb complexes: induction of resistance to EAE and long-term acceptance of islet allografts without immunosuppression."
Author(s):Webster KE, Walters S, Kohler RE, Mrkvanc T, Boyman O, Surh CD, Grey ST, Sprent J
PubMed Article URL:http://dx.doi.org/10.1084/jem.20082824

12-7311 was used in Flow cytometry/Cell sorting to demonstrate the numerous pathways leading to the secretion of IFN-gamma by CD8+ T cells during infection.

Mouse / Not Cited

Infection and immunity (Apr 2009; 77: 1492)
"Multiple mechanisms contribute to the robust rapid gamma interferon response by CD8+ T cells during Listeria monocytogenes infection."
Author(s):Bou Ghanem EN, McElroy DS, D’Orazio SE
PubMed Article URL:http://dx.doi.org/10.1128/IAI.01207-08

12-7311 was used in Flow cytometry/Cell sorting to study IL-7 and IL-15 regulation of CD8+ T-cell subsets during contraction of the immune response.

Mouse / Not Cited

Blood (Nov 2008; 112: 3704)
"IL-7 and IL-15 differentially regulate CD8+ T-cell subsets during contraction of the immune response."
Author(s):Rubinstein MP, Lind NA, Purton JF, Filippou P, Best JA, McGhee PA, Surh CD, Goldrath AW
PubMed Article URL:http://dx.doi.org/10.1182/blood-2008-06-160945

12-7311 was used in Flow cytometry/Cell sorting to investigate the augmentation of CD8+ T-cell-mediated adoptive immunotherapy by targeting a weakly immunogenic epitope.

Mouse / 1:100

Journal of immunotherapy (Hagerstown, Md. : 1997) (Oct 2008; 31: 906)
"Combined anti-CD40 conditioning and well-timed immunization prolongs CD8+ T cell accumulation and control of established brain tumors."
Author(s):Ryan CM, Staveley-O’Carroll K, Schell TD
PubMed Article URL:http://dx.doi.org/10.1097/CJI.0b013e318189f155
12-7311 was used in Flow cytometry/Cell sorting to show that Treg cells block lpr/lpr gld/gld Th cells from providing help to anti-chromatin B cells in an in vivo transfer system.

Journal of autoimmunity (Sep 2008; 31: 98)  
"Autoantibody production in lpr/lpr gld/gld mice reflects accumulation of CD4+ effector cells that are resistant to regulatory T cell activity."  
Author(s): Hondowicz BD, Fields ML, Nish SA, Larkin J, Caton AJ, Erikson J  
PubMed Article URL:http://dx.doi.org/10.1016/j.jaut.2008.04.022

12-7311 was used in Flow cytometry/Cell sorting to study regulatory T-cell mediated tolerance, showing that it is important on the Dicer-controlled microRNA pathway.

The Journal of experimental medicine (Sep 2008; 205: 1993)  
"Dicer-dependent microRNA pathway safeguards regulatory T cell function."  
Author(s): Liston A, Lu LF, O’Carroll D, Tarakhovsky A, Rudensky AY  
PubMed Article URL:http://dx.doi.org/10.1084/jem.20081062

12-7311 was used in Flow cytometry/Cell sorting to demonstrate the immunogenicity of two PE/PPE proteins in BALB/c mice.

Journal of medical microbiology (Sep 2008; 57: 1079)  
"Characterization of T-cell immunogenicity of two PE/PPE proteins of Mycobacterium tuberculosis."  
Author(s): Chaithra MG, Shaila MS, Nayak R  
PubMed Article URL:http://dx.doi.org/10.1099/jmm.0.47565-0

12-7311 was used in Flow cytometry/Cell sorting to study the blockade of PD-1/B7-H1 interaction to restore effector CD8+ T cell responses in a hepatitis C virus core murine model.

Journal of immunology (Baltimore, Md. : 1950) (Jul 2008; 181: 190)  
"Th17 cells undergo Fas-mediated activation-induced cell death independent of IFN-gamma."  
Author(s): Zhang Y, Xu G, Zhang L, Roberts AI, Shi Y  
PubMed Article URL:http://dx.doi.org/null

12-7311 was used in Flow cytometry/Cell sorting to study the efficiency and mechanisms by which chimeric NKG2D-modified T cells inhibit systemic T-cell lymphoma growth.

Journal of immunological methods (Jan 2008; 330: 137)  
"T cell acquisition of APC membrane can impact interpretation of adoptive transfer experiments using CD45 congenic mouse strains."  
Author(s): Cho KS, Hill AB  
PubMed Article URL:http://dx.doi.org/10.1016/j.jim.2007.10.019

12-7311 was used in Flow cytometry/Cell sorting to investigate the efficiency and mechanisms by which chimeric NKG2D-modified T cells inhibit systemic T-cell lymphoma growth.

"Blockade of PD-1/B7-H1 interaction restores effector CD8+ T cell responses in a hepatitis C virus core murine model."  
Author(s): Lukens JR, Cruise MW, Lassen MG, Hahn YS  
PubMed Article URL:http://dx.doi.org/null

12-7311 was used in Flow cytometry/Cell sorting to demonstrate the immunogenicity of two PE/PPE proteins in BALB/c mice.

Proceedings of the National Academy of Sciences of the United States of America (Jul 2008; 105: 4285)  
"IL-6-dependent and -independent pathways in the development of interleukin 17-producing T helper cells."  
Author(s): Kimura A, Naka T, Kishimoto T  
PubMed Article URL:http://dx.doi.org/10.1073/pnas.0801658105

12-7311 was used in Flow cytometry/Cell sorting to study how PE_PGRS 33 has access to the MHC class I processing pathway, and how short peptide fragments of this protein can be presented to CD8+ T cells.

Journal of medical microbiology (Apr 2007; 56: 466)  
"Evaluation of T-cell responses to peptides with MHC class I-binding motifs derived from PE_PGRS 33 protein of Mycobacterium tuberculosis."  
Author(s): Chaithra MG, Shaila MS, Nayak R  
PubMed Article URL:http://dx.doi.org/10.1099/jmm.0.46928-0
12-7311 was used in Flow cytometry/Cell sorting to show that mouse NK cells undergo homeostatic proliferation when transferred into NK-deficient Rag-/- gammaC-/- hosts.

**Immunocytochemistry References**

**Species / Dilution**

**Summary**

12-7311 was used in Immunocytochemistry to study the distinct roles of CD4 and CD8 T cells in the context of IFN-γ and IL-10 during Trypanosoma brucei infections.

**Mouse / Not Cited**

Infection and immunity (Jul 2015; 83: 2785)

"Distinct Contributions of CD4+ and CD8+ T Cells to Pathogenesis of Trypanosoma brucei Infection in the Context of Gamma Interferon and Interleukin-10."


PubMed Article URL:http://dx.doi.org/10.1038/jiim.2015.71

**Immunofluorescence References**

**Species / Dilution**

**Summary**

12-7311 was used in Flow cytometry/Cell sorting to investigate TCR usage in Leishmania-specific, IFN-γ-producing CD4(+) T cells, showing that the magnitude of activation rather than TCR diversity determines the outcome of infection.

**Mouse / Not Cited**

Parasite immunology (Mar 2011; 33: 170)

"The magnitude of CD4(+) T-cell activation rather than TCR diversity determines the outcome of Leishmania infection in mice."

Author(s): Xin L, Wanderley JL, Wang Y, Vargas-Inchaustegui DA, Soong L

PubMed Article URL:http://dx.doi.org/10.1111/j.1365-3024.2010.01268.x

**ELISA References**

**Species / Dilution**

**Summary**

12-7311 was used in an ELISA assay to study the role of ASK1 in the contact hypersensitivity response.

**Mouse / Not Cited**

Scientific reports (Apr 2014; 4: null)

"ASK1 promotes the contact hypersensitivity response through IL-17 production."

Author(s): Mizukami J, Sato T, Camps M, Ji H, Rueckle T, Swinnen D, Tsuboi R, Takeda K, Ichijo H

PubMed Article URL:http://dx.doi.org/10.1038/srep04714

**Miscellaneous PubMed References**

**Species / Dilution**

**Summary**

12-7311 was used in Flow cytometry/Cell sorting to investigate TCR usage in Leishmania-specific, IFN-γ-producing CD4(+) T cells, showing that the magnitude of activation rather than TCR diversity determines the outcome of infection.

**Mouse / Not Cited**

**Summary**

"Th17 cells undergo Fas-mediated activation-induced cell death independent of IFN-gamma."

Author(s): Zhang Y, Xu G, Zhang L, Roberts AI, Shi Y

PubMed Article URL:http://dx.doi.org/10.1016/j.jcyto.2012.11.026

**Not Applicable / Not Cited**


"IFN-gamma decreases CTL generation by limiting IL-2 production: A feedback loop controlling effector cell production."

Author(s): Hidalgo LG, Urmson J, Halloran PF

PubMed Article URL:http://dx.doi.org/10.1111/j.1600-6143.2005.00761.x
"T cell acquisition of APC membrane can impact interpretation of adoptive transfer experiments using CD45 congeneric mouse strains."
Author(s): Cho KS, Hill AB
PubMed Article URL: http://dx.doi.org/10.1016/j.jim.2007.10.019

"IL-6-dependent and -independent pathways in the development of interleukin 17-producing T helper cells."
Author(s): Kimura A, Naka T, Kishimoto T
PubMed Article URL: http://dx.doi.org/10.1073/pnas.0705268104

"IFN-gamma decreases CTL generation by limiting IL-2 production: A feedback loop controlling effector cell production."
Author(s): Hidalgo LG, Urmson J, Halloran PF
PubMed Article URL: http://dx.doi.org/10.1111/j.1660-6143.2005.00761.x

1 Functional Assay References

Species / Dilution

Summary

Not Applicable / Not Cited

Journal of immunology (Baltimore, Md.: 1950) (Jul 2008; 181: 190)
"Th17 cells undergo Fas-mediated activation-induced cell death independent of IFN-gamma."
Author(s): Zhang Y, Xu G, Zhang L, Roberts AI, Shi Y
PubMed Article URL: http://dx.doi.org/null

1 Neutralization References

Species / Dilution

Summary

Not Applicable / Not Cited

"IFN-gamma decreases CTL generation by limiting IL-2 production: A feedback loop controlling effector cell production."
Author(s): Hidalgo LG, Urmson J, Halloran PF
PubMed Article URL: http://dx.doi.org/10.1111/j.1660-6143.2005.00761.x