





# CD86 Monoclonal Antibody (BU63)

Catalog Number MA1-10293 Product data sheet

Details	
Size	100 μg
Host/Isotope	Mouse / IgG1
Class	Monoclonal
Туре	Antibody
Clone	BU63
Immunogen	B-lymphoblastoid cell line ARH 77
Conjugate	Unconjugated
Form	Liquid
Concentration	1 mg/mL
Purification	Protein A
Storage buffer	PBS, pH 7.4
Contains	15mM sodium azide
Storage Conditions	4° C, do not freeze

Species Reactivity		
Species reactivity	Human	
Published species	Human, Not Applicable	
Tested Applications	Dilution *	
Flow Cytometry (Flow)	5 μg/ml	
Immunohistochemistry (Frozen) (IHC (F))	Assay-Dependent	
Immunoprecipitation (IP)	Assay-Dependent	
Western Blot (WB)	Assay-Dependent	
Published Applications		
Immunocytochemistry (ICC/IF)	See 1 publications below	
Western Blot (WB)	See 1 publications below	
Flow Cytometry (Flow)	See 23 publications below	
Miscellaneous PubMed (Misc)	See 6 publications below	
Inhibition Assays (IA)	See 1 publications below	
ELISA (ELISA)	See 1 publications below	

<sup>\*</sup> 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.

# **Background/Target Information**

CD86 is one of two ligands (the other CD80) for CTLA4 and CD28. CD86 acts as costimulatory molecule in eliciting T-cell help during antigen presentation. Antigen presentation in the absence of sufficient co-stimulation involving CD86/CD80 can induce tolerance. CD80 appears to play a role distinct from CD80 in T helper cell differentiation. CD86 is a type I membrane protein that is a member of the immunoglobulin superfamily. The CD86 protein is expressed by antigen-presenting cells, and it is the ligand for two proteins at the cell surface of T cells, CD28 antigen and cytotoxic T-lymphocyte-associated protein 4. Binding of CD86 with CD28 antigen is a costimulatory signal for activation of the T-cell. Binding of CD86 with cytotoxic T-lymphocyte-associated protein 4 negatively regulates T-cell activation and diminishes the immune response. Alternative splicing results in two transcript variants encoding different isoforms of CD86. Additional transcript variants have been described for CD86, but their full-length sequences have not been determined. Diseases associated with CD86 dysfunction include gallbladder squamous cell carcinoma and myocarditis.

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

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

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

NO OTHER WARRANTIES, EXPRESS OR IMPLED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT, BUYER'S EXCLUSINE REALED FOR ROCKETOR POR REFUNDED FOR ROCKETOR FOR REFUNDED FOR ROPE OF REFUNDED FOR ROCKETOR FOR REFUNDED FOR REFUNDED FOR ROCKETOR FOR REFUNDED FOR REFUNDED FOR ROCKETOR FOR REFUNDED FOR

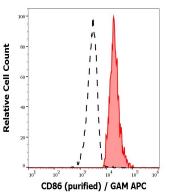


# Product Images For CD86 Monoclonal Antibody (BU63)

# Sels: Ross explenouses

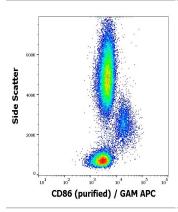
### CD86 Antibody (MA1-10293) in Flow

Flow Cytometry analysis of human Raji cells (left panel) and mouse spenocytes (right panel) using CD86 monoclonal antibody (Product # MA1-10293) at  $0.5\mu x$  10^6 cells in  $100\mu L$ . CD86 (green) was detected using a DyLight-488 Donkey anti-Mouse IgG (H+L) cross-adsorbed secondary antibody (Product # A-21202) at 1:200. The negative control (blue) represents Mouse IgG Isotype Control (Product # MA5-14453). Results show positive staining in human cells with no cross-reactivity to mouse. Data provided courtesy of Antibody Resource.



## CD86 Antibody (MA1-10293) in Flow

Separation of human monocytes (red-filled) from lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD86 (BU63) purified Monoclonal antibody (Product # MA1-10293) (concentration in sample 3 µg/mL) GAM APC.



## CD86 Antibody (MA1-10293) in Flow

Flow cytometry surface staining pattern of human peripheral blood stained using anti-human CD86 (BU63) purified Monoclonal antibody (Product # MA1-10293) (concentration in sample 3 µg/mL) GAM APC.

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

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

NO OTHER WARRANTIES, EXPRESS OR IMPLED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT, BUYER'S EXCLUSIVE REALED FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPLAY, REPLACED RETURN FOR REFULDING FOR REFULD FOR PROPERTY IS ASTER OF REFULDING FOR REFULD FOR A REFULDING FOR REFULD FOR REFULD FOR REFULD FOR REFULD FOR REFULDING FOR REFULD FOR REFULD FOR REFULD FOR REFULD FOR REFULDING FOR REFULD FOR REFULDING FOR REFULD FOR REFULDING FOR REFULDING FOR REFULD FOR REFULDING FOR R



PubMed References For CD86 Monoclonal Antibody (BU63)				
1 Immunocytochemistry R				
Species / Dilution	Summary  MAA 40000 was used in flow automatic and improves a technologistic to compare V. Lef Mee. 4 with other posterorbil			
	MA1-10293 was used in flow cytometry and immunocytochemistry to compare X-L of Mac -1 with other neutrophil activators			
Not Applicable / Not Cited	Immunology ( 2006; 119: 562)  "Major histocompatibility complex class II (DR) antigen and costimulatory molecules on in vitro and in vivo activated human polymorphonuclear neutrophils."  Author(s):Sandilands GP,McCrae J,Hill K,Perry M,Baxter D  PubMed Article URL:http://dx.doi.org/10.1111/j.1365-2567.2006.02471.x			
l Western Blot References				
Species / Dilution	Summary			
	MA110293 was used in western blot to report the effects of long-term lipopolysaccharide exposure on monocytes			
Human / Not Cited	Toxicology in vitro: an international journal published in association with BIBRA (2017; 42: 1)  "Long-term culture with lipopolysaccharide induces dose-dependent cytostatic and cytotoxic effects in THP-1 monocytes."  Author(s):Mytych J,Romerowicz-Misielak M,Koziorowski M  PubMed Article URL:http://dx.doi.org/10.1016/j.tiv.2017.03.009			
23 Flow Cytometry Referer	nces			
Species / Dilution	Summary			
Not Applicable / Not Cited	MA1-10293 was used in flow cytometry to report that OX40 ligand is selectively induced by IL-2, IL-12, or IL-15-activated human NK cells following stimulation through NKG2D			
	Journal of immunology (Baltimore, Md. : 1950) ( 2004; 173: 3716)  "Cross-talk between activated human NK cells and CD4+ T cells via OX40-OX40 ligand interactions."  Author(s):Zingoni A,Sornasse T,Cocks BG,Tanaka Y,Santoni A,Lanier LL  PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.173.6.3716			
Not Applicable / Not Cited	MA1-10293 was used in flow cytometry to show that oxidized phospholipid treatment interferes with dendritic cell maturation			
	Journal of immunology (Baltimore, Md.: 1950) (2005; 175: 501)  "Oxidized phospholipids negatively regulate dendritic cell maturation induced by TLRs and CD40."  Author(s):Blüml S,Kirchberger S,Bochkov VN,Krönke G,Stuhlmeier K,Majdic O,Zlabinger GJ,Knapp W,Binder BR,Stöckl Leitinger N  PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.175.1.501			
Not Applicable / Not Cited	MA1-10293 was used in flow cytometry to determine the role of HIV-1 Nef in dendritic cell-mediated viral transmission and HIV-1 infection			
	PloS one ( 2012; 7: ) "HIV-1 Nef enhances dendritic cell-mediated viral transmission to CD4+ T cells and promotes T-cell activation." Author(s):St Gelais C,Coleman CM,Wang JH,Wu L PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0034521			
	MA1-10293 was used in Flow cytometry/Cell sorting to investigate whether synovial B cells in juvenile idiopathic arthritis display features of antigen-presenting cells.			
Human / Not Cited	Arthritis and rheumatism (2011; 63: 3458)  "Activated memory B cells may function as antigen-presenting cells in the joints of children with juvenile idiopathic arthritis."  Author(s):Marketh H Wisgering V Right B Schwarz T Suffa N Fighborn EM Eyrich M Circobiok H L			
	Author(s):Morbach H,Wiegering V,Richl P,Schwarz T,Suffa N,Eichhorn EM,Eyrich M,Girschick HJ PubMed Article URL:http://dx.doi.org/10.1002/art.30569			
Not Applicable / Not Cited	MA1-10293 was used in flow cytometry to test if chondrocytes attract lymphocytes and if cartilage chondrocytes from patients with ankylosing spondylitis stimulate T cells in an HLA-restricted manner			
	Arthritis and rheumatism ( 2009; 60: 1635)  "HLA-B27-restricted antigen presentation by human chondrocytes to CD8+ T cells: potential contribution to loca immunopathologic processes in ankylosing spondylitis."  Author(s):Kuhne M,Erben U,Schulze-Tanzil G,Köhler D,Wu P,Richter FJ,John T,Radbruch A,Sieper J,Appel H PubMed Article URL:http://dx.doi.org/10.1002/art.24549			

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

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

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



	MA1-10293 was used in flow cytometry to investigate how neutrophils present antigen
Not Applicable / Not Cited	Immunology ( 2005; 114: 354) "Cross-linking of neutrophil CD11b results in rapid cell surface expression of molecules required for antigen presentation and T-cell activation." Author(s):Sandilands GP,Ahmed Z,Perry N,Davison M,Lupton A,Young B PubMed Article URL:http://dx.doi.org/10.1111/j.1365-2567.2004.02114.x
Not Applicable / Not Cited	MA1-10293 was used in flow cytometry to study human cytomegalovirus-specific CD4+ and CD8+ T cells
	European journal of immunology ( 2005; 35: 1795)  "Simultaneous quantification of human cytomegalovirus (HCMV)-specific CD4+ and CD8+ T cells by a novel method using monocyte-derived HCMV-infected immature dendritic cells."  Author(s):Lozza L,Lilleri D,Percivalle E,Fornara C,Comolli G,Revello MG,Gerna G  PubMed Article URL:http://dx.doi.org/10.1002/eji.200526023
	MA1-10293 was used in flow cytometry to investigate the role of type I IFN and tetherin in HIV-1 infection of dendritic cells
Not Applicable / Not Cited	Retrovirology ( 2011; 8: ) "Tetherin does not significantly restrict dendritic cell-mediated HIV-1 transmission and its expression is upregulated by newly synthesized HIV-1 Nef." Author(s):Coleman CM,Spearman P,Wu L PubMed Article URL:http://dx.doi.org/10.1186/1742-4690-8-26
Not Applicable / Not Cited	MA1-10293 was used in flow cytometry to describe the epidemiologic and clinical presentation of zinc toxicosis in baboons in captivity
	Journal of medical primatology ( 2004; 33: 197)  "White monkey syndrome in infant baboons (Papio species)."  Author(s):Frost PA,Hubbard GB,Dammann MJ,Snider CL,Moore CM,Hodara VL,Giavedoni LD,Rohwer R,Mahaney MC, Butler TM,Cummins LB,McDonald TJ,Nathanielsz PW,Schlabritz-Loutsevitch NE PubMed Article URL:http://dx.doi.org/10.1111/j.1600-0684.2004.00071.x
Not Applicable / Not Cited	MA1-10293 was used in flow cytometry to identify and characterize a signal transduction cascade in monocytes that results in their differentiation into dendritic cells
	Journal of immunology (Baltimore, Md.: 1950) (2008; 181: 6859)  "Dendritic cell differentiation induced by a self-peptide derived from apolipoprotein E."  Author(s):Stephens TA,Nikoopour E,Rider BJ,Leon-Ponte M,Chau TA,Mikolajczak S,Chaturvedi P,Lee-Chan E,Flavell RA, Haeryfar SM,Madrenas J,Singh B  PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.181.10.6859
	MA1-10293 was used in flow cytometry to report that bacterial ghosts can deliver nucleic acid-encoded antigens
Not Applicable / Not Cited	Journal of immunotherapy (Hagerstown, Md.: 1997) ( 2005; 28: 136)  "Bacterial ghosts as novel efficient targeting vehicles for DNA delivery to the human monocyte-derived dendritic cells."  Author(s):Kudela P,Paukner S,Mayr UB,Cholujova D,Schwarczova Z,Sedlak J,Bizik J,Lubitz W  PubMed Article URL:http://dx.doi.org/10.1097/01.cji.0000154246.89630.6f
Not Applicable / Not Cited	MA1-10293 was used in flow cytometry to explore the role of HIV in potentially modulating macrophage function
	Retrovirology (2013; 10:)  "A consensus surface activation marker signature is partially dependent on human immunodeficiency virus type  1 Nef expression within productively infected macrophages."  Author(s):Babu R,Brown A  PubMed Article URL:http://dx.doi.org/10.1186/1742-4690-10-155
Not Applicable / 3.3 μg/ml	MA1-10293 was used in flow cytometry to develop a dendritic cell-dedicated microarray
	Journal of leukocyte biology ( 2005; 78: 794)  "Profiling dendritic cell maturation with dedicated microarrays."  Author(s):McIlroy D,Tanguy-Royer S,Le Meur N,Guisle I,Royer PJ,Léger J,Meflah K,Grégoire M  PubMed Article URL:http://dx.doi.org/10.1189/jlb.0105029
	MA1-10293 was used in flow cytometry to characterize dendritic cells in type 1 and type 2 diabetes
Not Applicable / Not Cited	Clinical immunology (Orlando, Fla.) ( 2006; 121: 81)  "Reduced IFN-alpha secretion by blood dendritic cells in human diabetes."  Author(s):Summers KL,Marleau AM,Mahon JL,McManus R,Hramiak I,Singh B  PubMed Article URL:http://dx.doi.org/10.1016/j.clim.2006.05.015

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

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

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



	MA1-10293 was used in flow cytometry to discuss the creation of stable T-cell lines to study their impact in inflammatory bowel disease
Not Applicable / Not Cited	Scandinavian journal of gastroenterology ( 2004; 39: 1236) "Higher proliferative capacity of T lymphocytes from patients with Crohn disease than from ulcerative colitis is disclosed by use of Herpesvirus saimiri-transformed T-cell lines." Author(s):Aguilera-Montilla N,Pérez-Blas M,Valeri AP,López-Santalla M,Rodríguez-Juan C,Mencía A,Castellano G, Manzano ML,Casis B,Sánchez F,Martín-Villa JM PubMed Article URL:http://dx.doi.org/10.1080/00365520410008015
	MA1-10293 was used in flow cytometry to study the effect of natural occurring viral ssRNA on DC function
Not Applicable / Not Cited	Journal of immunology (Baltimore, Md.: 1950) (2009; 183: 4440)  "The ssRNA genome of human rhinovirus induces a type I IFN response but fails to induce maturation in human monocyte-derived dendritic cells."  Author(s):Schrauf C,Kirchberger S,Majdic O,Seyerl M,Zlabinger GJ,Stuhlmeier KM,Sachet M,Seipelt J,Stöckl J PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.0804147
Not Applicable / Not Cited	MA1-10293 was used in flow cytometry to show that human dendritic cells are an extrahepatic source of soluble complement proteins
	Inflammation research: official journal of the European Histamine Research Society [et al.] (2006; 55: 179)  "Human monocyte-derived dendritic cells are a source of several complement proteins."  Author(s):Reis ES,Barbuto JA,Isaac L  PubMed Article URL:http://dx.doi.org/10.1007/s00011-006-0068-y
	MA1-10293 was used in flow cytometry to elucidate how the monoclonal antibody, 11C9, reduces dendritic cell-induced T cell activation
Not Applicable / Not Cited	Journal of immunology (Baltimore, Md. : 1950) ( 2004; 173: 6000)  "CD63 as an activation-linked T cell costimulatory element."  Author(s):Pfistershammer K,Majdic O,Stöckl J,Zlabinger G,Kirchberger S,Steinberger P,Knapp W  PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.173.10.6000
	MA1-10293 was used in flow cytometry to study T-cell lines from gastric cancer patients and healthy volunteers
Not Applicable / Not Cited	Cancer immunology, immunotherapy: CII ( 2003; 52: 708)  "Intrinsic defects explain altered proliferative responses of T lymphocytes and HVS-derived T-cell lines in gastric adenocarcinoma."  Author(s): Valeri AP, Pérez-Blas M, Gutiérrez A, López-Santalla M, Aguilera N, Rodríguez-Juan C, Sala-Silveira L, Martín J, Lasa I, Mugüerza JM, López A, García-Sancho L, Granell J, Martín-Villa JM  PubMed Article URL: http://dx.doi.org/10.1007/s00262-003-0413-8
	MA1-10293 was used in flow cytometry to test if transfer of allogeneic material to T cells modifies human alloresponses
Not Applicable / Not Cited	American journal of transplantation: official journal of the American Society of Transplantation and the American Society of Transplant Surgeons (2005; 5: 1614)  "Acquisition of HLA-DR and costimulatory molecules by T cells from allogeneic antigen presenting cells."  Author(s):Game DS,Rogers NJ,Lechler RI  PubMed Article URL:http://dx.doi.org/10.1111/j.1600-6143.2005.00916.x
Not Applicable / Not Cited	MA1-10293 was used in flow cytometry to identify changes in peripheral B cell subsets in patients with systemic lupus erythematosus
	Arthritis and rheumatism ( 2008; 58: 1762)  "Activated memory B cell subsets correlate with disease activity in systemic lupus erythematosus: delineation by expression of CD27, IgD, and CD95."  Author(s):Jacobi AM,Reiter K,Mackay M,Aranow C,Hiepe F,Radbruch A,Hansen A,Burmester GR,Diamond B,Lipsky PE, Dörner T  PubMed Article URL:http://dx.doi.org/10.1002/art.23498
	MA1-10293 was used in flow cytometry to characterize B cells in human tonsils
Not Applicable / Not Cited	Blood (2007; 109: 2545) <b>"A novel human B cell subpopulation representing the initial germinal center population to express AID."</b> Author(s):Kolar GR,Mehta D,Pelayo R,Capra JD PubMed Article URL:http://dx.doi.org/10.1182/blood-2006-07-037150
Not Applicable / Not Cited	MA1-10293 was used in flow cytometry to characterize gastric adenocarcinoma with and without residual neoplasic disease
	Cancer immunology, immunotherapy: CII ( 2006; 55: 744)  "Expression of CD45 and proliferative response to CD3 as suitable classification markers of patients with gastric adenocarcinoma."  Author(s):López-Santalla M,Valeri AP,Pérez-Blas M,Aguilera-Montilla N,Gutiérrez A,Lasa I,Mugüerza JM,Martín J,García-Sancho L,Granell J,Martín-Villa JM  PubMed Article URL:http://dx.doi.org/10.1007/s00262-005-0072-z

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

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation in the Buyer. Any model or sample furnished to Design is merely illustrated or the general type and quality of goods and does not represent that any Product will combine to such model or sample furnished to Design is merely illustrated or the general type and quality of goods and does not represent that any Product will combine the support of the period of the product of the period of the

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



	ed References
Species / Dilution	Summary
Human / Not Cited	MA1-10293 was used in flow cytometry to examine the effects of age and gender on TLR9 expression on human DCs.
	Human immunology (2012; 73: 493)  "Plasmacytoid dendritic cells and their Toll-like receptor 9 expression selectively decrease with age."  Author(s):Garbe K,Bratke K,Wagner S,Virchow JC,Lommatzsch M  PubMed Article URL:http://dx.doi.org/10.1016/j.humimm.2012.02.007
Human / Not Cited	MA1-10293 was used in flow cytometry to study the molecular and functional changes induced in T cells that interact with the endothelium.
	Journal of immunology (Baltimore, Md. : 1950) ( 2002; 168: 3227)  "Functional consequences of noncognate interactions between CD4+ memory T lymphocytes and the endothelium."  Author(s):Berg LP,James MJ,Alvarez-Iglesias M,Glennie S,Lechler RI,Marelli-Berg FM PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.168.7.3227
	MA1-10293 was used in flow cytometry to clone and study CD93.
Human / Not Cited	Journal of leukocyte biology (2002; 71: 133)  "Identification of human CD93 as the phagocytic C1q receptor (C1qRp) by expression cloning."  Author(s):Steinberger P,Szekeres A,Wille S,Stöckl J,Selenko N,Prager E,Staffler G,Madic O,Stockinger H,Knapp W  PubMed Article URL:http://www.ncbi.nlm.nih.gov/pubmed/11781389
Human / Not Cited	MA1-10293 was used in flow cytometry to test if follicular dendritic cells contribute to the antigen-presenting capability of licells.
	Cellular immunology (2012; 273: 109)  "Human follicular dendritic cells promote the APC capability of B cells by enhancing CD86 expression levels."  Author(s):Kim J,Kim YM,Jeoung DI,Choe J  PubMed Article URL:http://dx.doi.org/10.1016/j.cellimm.2012.01.003
Human / Not Cited	MA1-10293 was used in flow cytometry to examine the ability of Leishmania species to prime DCs for CD40L-dependent IL-12p70 secretion.
	Infection and immunity ( 2002; 70: 3994)  "Leishmania priming of human dendritic cells for CD40 ligand-induced interleukin-12p70 secretion is strain and species dependent."  Author(s):McDowell MA,Marovich M,Lira R,Braun M,Sacks D  PubMed Article URL:http://dx.doi.org/10.1128/IAI.70.8.3994-4001.2002
Human / Not Cited	MA1-10293 was used in flow cytometry to discuss methods to generate human monocyte-derived DCs and assess their maturation, activation, and function, using interaction with the gram-negative bacterial pathogen Neisseria meningitidis as a model.
	Methods in molecular biology (Clifton, N.J.) ( 2012; 799: 217)  "Human dendritic cell culture and bacterial infection."  Author(s):Jones HE,Klein N,Dixon GL  PubMed Article URL:http://dx.doi.org/10.1007/978-1-61779-346-2_14
1 Inhibition Assays Ref	erences
Species / Dilution	Summary
Human / Not Cited	MA1-10293 was used in Flow cytometry/Cell sorting to investigate whether synovial B cells in juvenile idiopathic arthritis display features of antigen-presenting cells.
	Arthritis and rheumatism (2011; 63: 3458)  "Activated memory B cells may function as antigen-presenting cells in the joints of children with juvenile idiopathic arthritis."  Author(s):Morbach H,Wiegering V,Richl P,Schwarz T,Suffa N,Eichhorn EM,Eyrich M,Girschick HJ  PubMed Article URL:http://dx.doi.org/10.1002/art.30569
1 ELISA References	
Species / Dilution	Summary
	MA1-10293 was used in ELISA to identify immunoregulatory molecules on dendritic cells.
Human / Not Cited	Journal of immunology (Baltimore, Md. : 1950) ( 2003; 170: 3637)  "B7-H1 (programmed death-1 ligand) on dendritic cells is involved in the induction and maintenance of T cell anergy."  Author(s):Selenko-Gebauer N,Majdic O,Szekeres A,Höfler G,Guthann E,Korthäuer U,Zlabinger G,Steinberger P,Pickl WF Stockinger H,Knapp W,Stöckl J

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

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

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

