

CD4 Monoclonal Antibody (S3.5), Qdot™ 605

Catalog NumberQ10008

Product data sheet

Details		Species Reactivity	
Size	100 µL	Species reactivity	Human
Host/Isotope	Mouse / IgG2a	Published species	Human, Not Applicable
Class	Monoclonal	Tested Applications	
Type	Antibody	Flow Cytometry (Flow)	Dilution * Assay-dependent
Clone	S3.5	Published Applications	
Immunogen	Human CD4	Flow Cytometry (Flow)	See 22 publications below
Conjugate	Qdot™ 605	Miscellaneous PubMed (Misc)	See 2 publications below
Form	Liquid	* 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.	
Purification	purified		
Storage buffer	0.05M borate, pH 8.3, with 1M betaine		
Contains	0.05% sodium azide		
Storage Conditions	4° C		

Background/Target Information

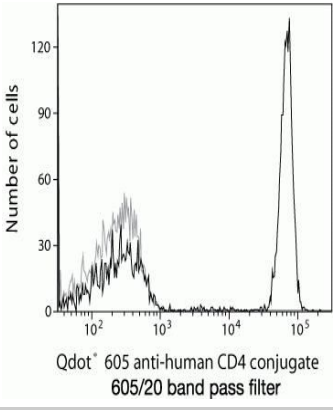
The CD4 antigen is involved in the recognition of MHC class II molecules and is a co-receptor for HIV. CD4 is primarily expressed in a subset of T-lymphocytes, also referred to as T helper cells, but may also be expressed by other cells in the immune system, such as monocytes, macrophages, and dendritic cells. At the tissue level, CD4 expression may be detected in thymus, lymph nodes, tonsils, and spleen, and also in specific regions of the brain, gut, and other non-lymphoid tissues. CD4 functions to initiate or augment the early phase of T-cell activation through its association with the T-cell receptor complex and protein tyrosine kinase, Lck. It may also function as an important mediator of direct neuronal damage in infectious and immune-mediated diseases of the central nervous system. Multiple alternatively spliced transcripts have been identified in this gene [RefSeq, July 2017].

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 IMPLIED, 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, REPLACEMENT OF 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, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.



CD4 Antibody (Q10008) in Flow
Qdot® 605 anti-human CD4 conjugate 605/20 band pass filter

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 IMPLIED, 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, REPLACEMENT OF 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, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

PubMed References For CD4 Monoclonal Antibody (S3.5), Qdot™ 605

22 Flow Cytometry References

Species / Dilution	Summary
	Q10008 was used in Flow cytometry/Cell sorting to provide new insights into the parameters of M. tuberculosis-specific CD4 T cell immunity that are impaired in HIV-infected individuals with LTBI, which may contribute to their increased risk of developing active tuberculosis disease.
Human / Not Cited	Journal of immunology (Baltimore, Md. : 1950) (2017; 199: 2069) "HIV-1 Infection Is Associated with Depletion and Functional Impairment of <i>Mycobacterium tuberculosis</i>-Specific CD4 T Cells in Individuals with Latent Tuberculosis Infection." Author(s):Day CL,Abrahams DA,Harris LD,van Rooyen M,Stone L,de Kock M,Hanekom WA PubMed Article URL: http://dx.doi.org/10.4049/jimmunol.1700558
	Q10008 was used in flow cytometry test if CD4 positive T cells expressing immune checkpoint molecules are enriched in HIV-infected cells in patients receiving antiretroviral therapy
Human / Not Cited	PLoS pathogens (2016; 12:) "CD4+ T Cells Expressing PD-1, TIGIT and LAG-3 Contribute to HIV Persistence during ART." Author(s):Fromentin R,Bakeman W,Lawani MB,Khoury G,Hartogensis W,DaFonseca S,Killian M,Epling L,Hoh R,Sinclair E,Hecht FM,Bacchetti P,Deeks SG,Lewin SR,Sékaly RP,Chomont N PubMed Article URL: http://dx.doi.org/10.1371/journal.ppat.1005761
	Q10008 was used in Flow cytometry/Cell sorting to study dissociation of CD25 and FOXP3 in CD4+ T cells at the site of inflammation in patients with juvenile arthritis..
Human / Not Cited	Journal of immunology (Baltimore, Md. : 1950) (2014; 193: 2699) "Hypomethylation at the regulatory T cell-specific demethylated region in CD25hi T cells is decoupled from FOXP3 expression at the inflamed site in childhood arthritis." Author(s):Bending D,Pesenacker AM,Ursu S,Wu Q,Lom H,Thirugnanabalan B,Wedderburn LR PubMed Article URL: http://dx.doi.org/10.4049/jimmunol.1400599
	Q10008 was used in flow cytometry to assess cell-mediated immune responses in Thai HIV phase III prime/boost vaccine trial patients
Not Applicable / Not Cited	Journal of immunology (Baltimore, Md. : 1950) (2012; 188: 5166) "The Thai phase III trial (RV144) vaccine regimen induces T cell responses that preferentially target epitopes within the V2 region of HIV-1 envelope." Author(s):de Souza MS,Ratto-Kim S,Chuenarom W,Schuetz A,Chantakulkij S,Nuntapinit B,Valencia-Micolta A,Thelian D,Nitayaphan S,Pitisuttithum P,Paris RM,Kaewkungwal J,Michael NL,Rerks-Ngarm S,Mathieson B,Marovich M,Currier JR, Kim JH PubMed Article URL: http://dx.doi.org/10.4049/jimmunol.1102756
	Q10008 was used in flow cytometry to assess the effect of delayed administration of the BCG vaccine on the induced immune response in Ugandan children
Human / Not Cited	The Journal of infectious diseases (2014; 209: 887) "Distinct T-cell responses when BCG vaccination is delayed from birth to 6 weeks of age in Ugandan infants." Author(s):Lutwama F,Kagina BM,Wajja A,Waiswa F,Mansoor N,Kirimunda S,Hughes EJ,Kiwanuka N,Joloba ML,Musoke P,Scriba TJ,Mayanja-Kizza H,Day CL,Hanekom WA PubMed Article URL: http://dx.doi.org/10.1093/infdis/jit570
	Q10008 was used in flow cytometry to characterize T cell responses of HIV-exposed, yet persistently uninfected individuals.
Human / Not Cited	Journal of virology (2013; 87: 9053) "Quantitative and qualitative differences in the T cell response to HIV in uninfected Ugandans exposed or unexposed to HIV-infected partners." Author(s):Pala P,Serwanga J,Watera C,Ritchie AJ,Moodie Z,Wang M,Goonetilleke N,Birabwa E,Hughes P,Senkaali D,Nakiboneka R,Grosskurth H,Haynes B,McMichael A,Kaleebu P PubMed Article URL: http://dx.doi.org/10.1128/JVI.00721-13
	Q10008 was used in Flow Cytometry to support the idea that the effector memory phenotype supports HIV-1 latency reversal in CD4+ T cells.
Human / Not Cited	Journal of virology (2019; 93:) "Differentiation into an Effector Memory Phenotype Potentiates HIV-1 Latency Reversal in CD4<sup>+</sup> T Cells." Author(s):Kulpa DA,Talla A,Brehm JH,Ribeiro SP,Yuan S,Bebin-Blackwell AG,Miller M,Barnard R,Deeks SG,Hazuda D, Chomont N,Sékaly RP PubMed Article URL: http://dx.doi.org/10.1128/JVI.00969-19

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 IMPLIED, 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, REPLACEMENT OF 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, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

	Q10008 was used in Flow cytometry/Cell sorting to evaluate the ability of tofacitinib and ruxolitinib, two FDA-approved Jak inhibitors, to block seeding and maintenance of the HIV reservoir in vitro.
Human / Not Cited	<p>PLoS pathogens (2017; 13:)</p> <p>"Novel mechanisms to inhibit HIV reservoir seeding using Jak inhibitors."</p> <p>Author(s):Gavegnano C,Brehm JH,Dupuy FP,Talla A,Ribeiro SP,Kulpa DA,Cameron C,Santos S,Hurwitz SJ,Marconi VC, Routy JP,Sabbagh L,Schinazi RF,Sékaly RP</p> <p>PubMed Article URL:http://dx.doi.org/10.1371/journal.ppat.1006740</p>
	Q10008 was used in flow cytometry to characterize T cells after MVA85A vaccination
Not Applicable / Not Cited	<p>European journal of immunology (2013; 43: 2409)</p> <p>"Heterologous vaccination against human tuberculosis modulates antigen-specific CD4+ T-cell function."</p> <p>Author(s):Dintwe OB,Day CL,Smit E,Nemes E,Gray C,Tameris M,McShane H,Mahomed H,Hanekom WA,Scriba TJ</p> <p>PubMed Article URL:http://dx.doi.org/10.1002/eji.201343454</p>
	Q10008 was used in flow cytometry to study facilitation of HIV-1 transmission to cervico-vaginal tissue ex vivo by interleukin-7
Not Applicable / Not Cited	<p>PLoS pathogens (2013; 9:)</p> <p>"Interleukin-7 facilitates HIV-1 transmission to cervico-vaginal tissue ex vivo."</p> <p>Author(s):Introini A, Vanpouille C, Lisco A, Grivel JC, Margolis L</p> <p>PubMed Article URL:http://dx.doi.org/10.1371/journal.ppat.1003148</p>
	Q10008 was used in flow cytometry to test the safety and immunogenicity of an adenovirus 35-vectored tuberculosis vaccine candidate AERAS-402 in infants
Human / Not Cited	<p>Vaccine (2014; 32: 5908)</p> <p>"The novel tuberculosis vaccine, AERAS-402, is safe in healthy infants previously vaccinated with BCG, and induces dose-dependent CD4 and CD8T cell responses."</p> <p>Author(s):Kagina BM,Tameris MD,Geldenduys H,Hatherill M,Abel B,Hussey GD,Scriba TJ,Mahomed H,Sadoff JC, Hanekom WA,Mansoor N,Hughes J,de Kock M,Whatney W,Africa H,Krohn C,Veldsman A,Kany AL,Douoguih M,Pau MG, Hendriks J,McClainc B,Benko J,Snowden MA,Hokey DA</p> <p>PubMed Article URL:http://dx.doi.org/10.1016/j.vaccine.2014.09.001</p>
	Q10008 was used in flow cytometry to study defective cellular immune response to pandemic H1N1 influenza A virus in obese and overweight adult humans
Not Applicable / Not Cited	<p>Obesity (Silver Spring, Md.) (2013; 21: 2377)</p> <p>"Overweight and obese adult humans have a defective cellular immune response to pandemic H1N1 influenza A virus."</p> <p>Author(s):Paich HA,Sheridan PA,Handy J,Karlsson EA,Schultz-Cherry S,Hudgens MG,Noah TL,Weir SS,Beck MA</p> <p>PubMed Article URL:http://dx.doi.org/10.1002/oby.20383</p>
	Q10008 was used in Flow cytometry/Cell sorting to conclude that CD8+ TOXPHOS cells represent a critical immune population to assess ICI response with the potential to be a new target to improve outcomes in melanoma patients.
Human / Not Cited	<p>The Journal of experimental medicine (2022; 219:)</p> <p>"A high OXPPOS CD8 T cell subset is predictive of immunotherapy resistance in melanoma patients."</p> <p>Author(s):Li C,Phoon YP,Karlinsey K,Tian YF,Thapaliya S,Thongkum A,Qu L,Matz AJ,Cameron M,Cameron C,Menoret A, Funchain P,Song JM,Diaz-Montero CM,Tamilselvan B,Golden JB,Cartwright M,Rodriguez A,Bonin C,Vella A,Zhou B, Gastman BR</p> <p>PubMed Article URL:http://dx.doi.org/10.1084/jem.20202084</p>
	Q10008 was used in Flow Cytometry to study the effect of PD-1 expression on bacterial load and functional capacity of Mycobacterial tuberculosis specific T cell responses.
Human / Not Cited	<p>Frontiers in immunology (2019; 9:)</p> <p>"PD-1 Expression on <i>Mycobacterium tuberculosis</i>-Specific CD4 T Cells Is Associated With Bacterial Load in Human Tuberculosis."</p> <p>Author(s):Day CL,Abrahams DA,Bunjun R,Stone L,de Kock M,Walz G,Wilkinson RJ,Burgers WA,Hanekom WA</p> <p>PubMed Article URL:http://dx.doi.org/10.3389/fimmu.2018.01995</p>
	Q10008 was used in flow cytometry to utilize flow cytometry to analyze intracellular Ca(2+) mobilization in human NK cell subsets
Not Applicable / Not Cited	<p>Methods in molecular biology (Clifton, N.J.) (2017; 1441: 117)</p> <p>"Analysis of Intracellular Ca(2+) Mobilization in Human NK Cell Subsets by Flow Cytometry."</p> <p>Author(s):Theorell J,Bryceson YT</p> <p>PubMed Article URL:http://dx.doi.org/10.1007/978-1-4939-3684-7_10</p>

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 IMPLIED, 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, REPLACEMENT OF 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, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

	<p>Q10008 was used in flow cytometry to assess the effects of long-term cryopreservation of fixed cells on the measurement of mycobacteria induced CD4 T cell immunity</p>
Human / Not Cited	<p>Journal of immunological methods (2015; 417: 22) "Qualification of a whole blood intracellular cytokine staining assay to measure mycobacteria-specific CD4 and CD8 T cell immunity by flow cytometry." Author(s):Kagina BM,Mansoor N,Kpamegan EP,Penn-Nicholson A,Nemes E,Smit E,Gelderbloem S,Soares AP,Abel B,Keyser A,Sidibana M,Hughes JE,Kaplan G,Hussey GD,Hanekom WA,Scriba TJ PubMed Article URL:http://dx.doi.org/10.1016/j.jim.2014.12.003</p>
	<p>Q10008 was used in Flow cytometry/Cell sorting to investigate whether PD-1 plays a functional role in HIV latency and reservoir persistence.</p>
Human / Not Cited	<p>Nature communications (2019; 10:) "PD-1 blockade potentiates HIV latency reversal ex vivo in CD4<sup>+</sup> T cells from ART-suppressed individuals." Author(s):Fromentin R,DaFonseca S,Costiniuk CT,El-Far M,Procopio FA,Hecht FM,Hoh R,Deeks SG,Hazuda DJ,Lewin SR,Routy JP,Sékaly RP,Chomont N PubMed Article URL:http://dx.doi.org/10.1038/s41467-019-08798-7</p>
	<p>Q10008 was used in Flow cytometry/Cell sorting to demonstrate that cells with the phenotype and transcriptional profile of regulatory T cells are enriched among cycling cells in health and in HIV infection.</p>
Human / Not Cited	<p>The Journal of clinical investigation (2018; 128: 5083) "Cycling CD4+ T cells in HIV-infected immune nonresponders have mitochondrial dysfunction." Author(s):Younes SA,Talla A,Pereira Ribeiro S,Saidakova EV,Korolevskaya LB,Shmagel KV,Shive CL,Freeman ML,Panigrahi S,Zweig S,Balderas R,Margolis L,Douek DC,Anthony DD,Pandiyan P,Cameron M,Sieg SF,Calabrese LH,Rodriguez B,Lederman MM PubMed Article URL:http://dx.doi.org/10.1172/JCI120245</p>
	<p>Q10008 was used in Flow cytometry/Cell sorting to help elucidate the relevance of NLRPs in childhood AD.</p>
Human / Not Cited	<p>The Journal of allergy and clinical immunology (2018; 141: 1482) "Early-onset childhood atopic dermatitis is related to NLRP2 repression." Author(s):Thürmann L,Grützmann K,Klöß M,Bieg M,Winter M,Polte T,Bauer T,Schick M,Bewerunge-Hudler M,Röder S,Bauer M,Wissenbach DK,Sack U,Weichenhan D,Mücke O,Plass C,Borte M,von Bergen M,Lehmann I,Eils R,Trump S PubMed Article URL:http://dx.doi.org/10.1016/j.jaci.2017.11.018</p>
	<p>Q10008 was used in Flow cytometry/Cell sorting to investigate pediatric infection, where AIDS typically develops more rapidly than in adults.</p>
Human / Not Cited	<p>Science translational medicine (2016; 8:) "Nonprogressing HIV-infected children share fundamental immunological features of nonpathogenic SIV infection." Author(s):Muenchhoff M,Adland E,Karimanzira O,Crowther C,Pace M,Csala A,Leitman E,Moonsamy A,McGregor C,Hurst J,Groll A,Mori M,Sinmyee S,Thobakgale C,Tudor-Williams G,Prendergast AJ,Kloverpris H,Roider J,Leslie A,Shingadia D,Brits T,Daniels S,Frater J,Willberg CB,Walker BD,Ndung'u T,Jooste P,Moore PL,Morris L,Goulder P PubMed Article URL:http://dx.doi.org/10.1126/scitranslmed.aag1048</p>
	<p>Q10008 was used in Flow cytometry/Cell sorting to propose that universally high mycobacterial sensitization in persons from high TB burden settings may impart broad inhibition of mycobacterial growth.</p>
Human / Not Cited	<p>PloS one (2017; 12:) "Application of a whole blood mycobacterial growth inhibition assay to study immunity against Mycobacterium tuberculosis in a high tuberculosis burden population." Author(s):Baguma R,Penn-Nicholson A,Smit E,Erasmus M,Day J,Makhetha L,de Kock M,Hughes EJ,van Rooyen M,Pienaar B,Stone L,Hanekom W,Brennan MJ,Wallis RS,Hatherill M,Scriba TJ PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0184563</p>
	<p>Q10008 was used in flow cytometry to study the immune responses of HIV-infected volunteers vaccinated against tuberculosis.</p>
Human / 1:333	<p>Clinical and vaccine immunology : CVI (2015; 22: 688) "Antiviral Innate Immune Activation in HIV-Infected Adults Negatively Affects H1/IC31-Induced Vaccine-Specific Memory CD4+ T Cells." Author(s):Lenz N,Schindler T,Kagina BM,Zhang JD,Lukindo T,Mpina M,Bang P,Kromann I,Hoff ST,Andersen P,Reither K,Churchyard GJ,Certa U,Daubenberger CA PubMed Article URL:http://dx.doi.org/10.1128/CVI.00092-15</p>

2 Miscellaneous PubMed References

Species / Dilution	Summary
--------------------	---------

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 IMPLIED, 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, REPLACEMENT OF 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, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

	Q10008 was used in flow cytometry to determine the role of conventional and regulatory T cells in protection from HIV-1 infection.
Human / Not Cited	<p>AIDS research and human retroviruses (2013; 29: 1321)</p> <p>"Differential regulatory T cell activity in HIV type 1-exposed seronegative individuals."</p> <p>Author(s):Pattacini L,Murnane PM,Kahle EM,Bolton MJ,Delrow JJ,Lingappa JR,Katabira E,Donnell D,McElrath MJ,Baeten JM,Lund JM</p> <p>PubMed Article URL:http://dx.doi.org/10.1089/AID.2013.0075</p>
	Q10008 was used in flow cytometry to examine the relationship between T cells and antigen load in patients with chronic Mycobacterium tuberculosis infection.
Human / Not Cited	<p>Journal of immunology (Baltimore, Md. : 1950) (2011; 187: 2222)</p> <p>"Functional capacity of Mycobacterium tuberculosis-specific T cell responses in humans is associated with mycobacterial load."</p> <p>Author(s):Day CL,Abrahams DA,Lerumo L,Janse van Rensburg E,Stone L,O'rie T,Pienaar B,de Kock M,Kaplan G, Mahomed H,Dheda K,Hanekom WA</p> <p>PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1101122</p>

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 IMPLIED, 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, REPLACEMENT OF 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, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.