

CD4 Monoclonal Antibody (RM4-5), FITC

Catalog Number MCD0401-3

Product data sheet

Details		Species Reactivity	
Size	3 mL	Species reactivity	Mouse
Host/Isotope	Rat / IgG2a	Published species	Mouse, Not Applicable
Class	Monoclonal	Tested Applications	Dilution *
Type	Antibody	Flow Cytometry (Flow)	Assay-dependent
Clone	RM4-5	Published Applications	
Immunogen	Mouse CD4	Flow Cytometry (Flow)	See 2 publications below
Conjugate	FITC	Miscellaneous PubMed (Misc)	See 1 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.	
Concentration	0.1 mg/mL		
Storage Conditions	4° C, store in dark		

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].

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PubMed References For CD4 Monoclonal Antibody (RM4-5), FITC

2 Flow Cytometry References

Species / Dilution	Summary
Not Applicable / Not Cited	MCD0401-3 was used in flow cytometry to study the in vivo role of cytokine- and antigen-mediated T cell activation in the resistance to Burkholderia pseudomallei
	The Journal of infectious diseases (2006; 193: 370) "Role of T cells in innate and adaptive immunity against murine Burkholderia pseudomallei infection." Author(s):Haque A,Easton A,Smith D,O'Garra A,Van Rooijen N,Lertmemongkolchai G,Titball RW,Bancroft GJ PubMed Article URL: http://dx.doi.org/10.1086/498983
Not Applicable / Not Cited	MCD0401-3 was used in flow cytometry to report that Runx3 drives thymocytes to select the CD4-8+ lineage
	Journal of immunology (Baltimore, Md. : 1950) (2005; 174: 2627) "Overexpression of the Runx3 transcription factor increases the proportion of mature thymocytes of the CD8 single-positive lineage." Author(s):Kohu K,Sato T,Ohno S,Hayashi K,Uchino R,Abe N,Nakazato M,Yoshida N,Kikuchi T,Iwakura Y,Inoue Y, Watanabe T,Habu S,Satake M PubMed Article URL: http://dx.doi.org/10.4049/jimmunol.174.5.2627

1 Miscellaneous PubMed References

Species / Dilution	Summary
Mouse / Not Cited	MCD0401-3 was used in flow cytometry to compare gut and peripheral T cell responses after staphylococcal enterotoxin treatment.
	Journal of immunology (Baltimore, Md. : 1950) (1998; 161: 5825) "Oral administration of the bacterial superantigen staphylococcal enterotoxin B induces activation and cytokine production by T cells in murine gut-associated lymphoid tissue." Author(s):Spiekermann GM,Nagler-Anderson C PubMed Article URL: http://www.ncbi.nlm.nih.gov/pubmed/9834060

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