

Datasheet: MCA2061A488

Description:	MOUSE ANTI HUMAN CD284:Alexa Fluor® 488			
Specificity:	CD284			
Other names:	TLR4			
Format:	ALEXA FLUOR® 488			
Product Type:	Monoclonal Antibody			
Clone:	HTA125			
Isotype:	lgG2a			
Quantity:	100 TESTS/1ml			

Product Details

Applications	This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit <u>www.bio-rad-antibodies.com/protocols</u> .					
		Yes	No	Not Determined	Suggested Dilution	
	Flow Cytometry	•			Neat	
	Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.					
Target Species	Human					
Species Cross Reactivity	Reacts with: Rhesus Monkey, Guinea Pig, Pig, Dog, Bovine N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.					
Product Form	Purified IgG conjugated to Alexa Fluor® 488 - liquid					
Max Ex/Em	Fluorophore	Excitation Max	k (nm) En	nission Max (nm)		
	Alexa Fluor®488	495		519		
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant					
Buffer Solution	Phosphate buffered sa	aline				

Preservative Stabilisers	0.09% sodium azide (NaN ₃) 1% bovine serum albumin
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml
Immunogen	Ba/F3 cell line expressing TLR4 (CD284).
External Database Links	UniProt: <u>O00206</u> <u>Related reagents</u> Entrez Gene: <u>7099</u> TLR4 <u>Related reagents</u>
RRID	AB_324875
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the mouse SP2/0 myeloma cell line.
Specificity	Mouse anti Human CD284 antibody, clone HTA125 recognizes the human Toll like receptor 4 (TLR4) cell surface antigen.
	TLR4, also known as CD284, has been demonstrated to act as a receptor for LPS on human monocytes and macrophages. TLR4 signalling of LPS stimulation requires the presence of the MD-2 molecule.
	TLR4 is weakly expressed by resting cells, but is upregulated following stimulation with LPS.
	This antibody has been demonstrated to block activation of monocytes with LPS. The use of a preservative free format of Mouse anti Human CD284 antibody, clone HTA125 (MCA2061EL) is recommended for functional assays.
Flow Cytometry	Use 10µl of the suggested working dilution to label 1 X 10^6 cells in 100μ l
References	 Shimazu, R. <i>et al.</i> (1999) MD-2, a molecule that confers lipopolysaccharide responsiveness on Toll-like receptor 4. <u>J Exp Med. 189 (11): 1777-82.</u> Sugawara, S. <i>et al.</i> (2000) Proteolysis of human monocyte CD14 by cysteine proteinases (gingipains) from <i>Porphyromonas gingivalis</i> leading to lipopolysaccharide hyporesponsiveness. <u>J Immunol. 165: 411-8.</u> Yang, S. <i>et al.</i> (2001) Synergistic effect of muramyldipeptide with lipopolysaccharide or lipoteichoic acid to induce inflammatory cytokines in human monocytic cells in culture. <u>Infect Immun. 69 (4): 2045-53.</u> Kawahara T <i>et al.</i> (2001) Type I <i>Helicobacter pylori</i> lipopolysaccharide stimulates toll-like receptor 4 and activates mitogen oxidase 1 in gastric pit cells. <u>Infect Immun. 69</u> (7): 4382-9. Baumgarten, G. <i>et al.</i> (2001) <i>In vivo</i> expression of proinflammatory mediators in the

adult heart after endotoxin administration: the role of toll-like receptor-4. <u>J Infect Dis. 183:</u> 1617-24.

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Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.
	Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.
Guarantee	12 months from date of despatch
Acknowledgements	This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2061A488

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL: Alexa Fluor® 488 (MCA929A488)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-ra	id.com	Email: antibody_sales_uk@bio-ra	ad.com	Email: antibody_sales_de@bio-rad.com

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