

Datasheet: MCA2061PE BATCH NUMBER 0712R

Description:	MOUSE ANTI HUMAN CD284:RPE		
Specificity:	CD284		
Other names:	TLR4		
Format:	RPE		
Product Type:	Monoclonal Antibody		
Clone:	HTA125		
lsotype:	lgG2a		
Quantity:	100 TESTS		

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 antibody 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 a guide only. It is recommended that the user titrates the antibody 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 R. Phycoerythrin (RPE) - lyophilized				
Reconstitution	Reconstitute with 1.0 ml distilled water				
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)		
	RPE 488nm laser	496	578		
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture				

	supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide1% Bovine Serum Albumin5% Sucrose
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_323899
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 (<u>MCA2061EL</u>) is recommended for functional assays.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood.
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> Jiang, Q. <i>et al.</i> (2000) Lipopolysaccharide induces physical proximity between CD14 and toll-like receptor 4 (TLR4) prior to nuclear translocation of NF-kappa B. <u>J Immunol.</u> <u>165 (7): 3541-4.</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>

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	 <i>ex vivo</i> Lipopolysaccharide Treatment Is Modulated by Metforr but Not by Alpha Ketoglutarate. <u>PLoS One. 10 (12): e0143851</u> 24. Xu, H. <i>et al.</i> (2015) Type 3 innate lymphoid cell depletion is lymphoid tissues of simian immunodeficiency virus-infected mataboxis 5072-80. 25. Blagitz, M,G. <i>et al.</i> (2015) Expression of CD14 and toll-like neutrophils in bovine mammary glands infected with <i>Coryneba</i> Veterinária Brasileira. 35 (1): 1-5. 26. Huang, D. <i>et al.</i> (2016) Hyperoxia induces inflammation ar production in alveolar epithelium through TLR2/4-NF-kB-deper Med Pharmacol Sci. 20: 1399-410. 27. Kyrova, K. <i>et al.</i> (2014) The response of porcine monocyted dendritic cells to <i>Salmonella typhimurium</i> and lipopolysacchari 28. Ibeagha-Awemu, E.M. <i>et al.</i> (2008) Bacterial lipopolysacchari 29. Chochi, K. <i>et al.</i> (2008) <i>Helicobacter pylori</i> augments grow lipopolysaccharide-toll-like receptor 4 pathway whereas its lipopantitum activities of human mononuclear cells. <u>Clin Cancer F</u> 30. Elner, S.G. <i>et al.</i> (2018) Canine primary jejunal and cold predominantly express TLR5 and TLR9 but do not change TLR stimulation with certain Toll-like receptor ligands. Vet Immunol 32. Awuah, D. <i>et al.</i> (2019) The Cross-Talk between miR-511-50 	s mediated by TLRs in acaques. <u>FASEB J. 29 (12)</u> : e receptors 2 and 4 by milk <i>acterium bovis</i> <u>Pesquisa</u> and regulates cytokine indent mechanism <u>Eur Rev</u> e derived macrophages and de. <u>BMC Vet Res. 10: 244.</u> haride induces increased signaling molecules in th of gastric cancers via the polysaccharide attenuates <u>Res. 14 (10): 2909-17.</u> ment epithelial endotoxin <u>5 (12): 4627-33.</u> pnic epithelial cells R expression pattern after <u>Immunopathol. 206: 16-24.</u> Bp and C-Type Lectin
Storage	Receptors on Dendritic Cells Affects Dendritic Cell Function. J Store at +4°C.	<u>Immunol. 203 (1): 148-57.</u>
	DO NOT FREEZE.	
	This product should be stored undiluted. This product is photo- protected from light. Should this product contain a precipitate w microcentrifugation before use.	
Guarantee	12 months from date of despatch	
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA2061PE 20487	
Regulatory	For research purposes only	

Related Products

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL:RPE (MCA929PE)

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@b	bio-rad.com	Email: antibody_sales_uk@bic	-rad.com	Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M375412:210104'

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