

Datasheet: MCA2265

Description:	MOUSE ANTI HUMAN CD289	
Specificity:	CD289	
Other names:	TLR9	
Format:	Purified	
<b>Product Type:</b>	Monoclonal Antibody	
Clone:	5G5	
Isotype:	lgG2a	
Quantity:	0.25 mg	

## **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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry (1)				
Immunohistology - Frozen				
Immunohistology - Paraffin				
ELISA				
Immunoprecipitation				
Western Blotting				

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.

(1) Membrane permeabilization is required for this application. The use of Leucoperm (Product Code <u>BUF09</u>) is recommended for this purpose.

Target Species	Human
Species Cross Reactivity	Reacts with: Mouse, Dog <b>N.B.</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 - liquid

Preparation	Antibody purified from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	< 0.1% sodium azide (NaN <sub>3</sub> ) 1% bovine serum albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	Fusion protein of human TLR9 (amino acids 1-815).
External Database Links	UniProt:  Q9NR96 Related reagents  Entrez Gene:
	54106 TLR9 Related reagents
RRID	AB_324147
Specificity	Mouse anti Human CD289 antibody, clone 5G5 recognizes human, canine and murine TLR9, otherwise known as CD289. TLR9 is a member of the Toll-like receptor (TLR) family and functions as a receptor for bacterial DNA (CpG-DNA), playing a fundamental role in pathogen recognition and activation of innate immunity. TLRs are expressed on the cell surface and the endocytic compartment and recognize pathogen-associated molecular patterns (PAMPs) that are expressed on infectious agents. They also initiate cell signalling to induce production of cytokines necessary for the innate immunity and subsequent adaptive immunity.  In mouse RAW264 cells TLR9 has been shown to be expressed intracellularly, but not at the cell surface.
Flow Cytometry	Use 10µl of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.
Western Blotting	Mouse anti Human CD289 antibody, clone 5G5 detects a band of approximately 170-180 kDa in RAW264 cell lysates.
References	<ol> <li>Ahmad-Nejad, P. et al. (2002) Bacterial CpG-DNA and lipopolysaccharides activate Toll-like receptors at distinct cellular compartments. <u>Eur J Immunol. 32 (7): 1958-68.</u></li> <li>Batsford, S. et al. (2011) Protein level expression of Toll-like receptors 2, 4 and 9 in renal disease. <u>Nephrol Dial Transplant. 26 (4): 1413-6.</u></li> <li>Maiolini, A. et al. (2012) Toll-like receptors 4 and 9 are responsible for the maintenance of the inflammatory reaction in canine steroid-responsive meningitis-arteritis, a large animal model for neutrophilic meningitis. <u>J Neuroinflammation. 9: 226.</u></li> <li>Reineking, W. et al. (2018) Canine primary jejunal and colonic epithelial cells predominantly express TLR5 and TLR9 but do not change TLR expression pattern after stimulation with certain Toll-like receptor ligands. <u>Vet Immunol Immunopathol. 206: 16-24.</u></li> </ol>

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.

Guarantee 12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #10041 available at:

https://www.bio-rad-antibodies.com/SDS/MCA2265

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**Regulatory** For research purposes only

## Related Products

# **Recommended Secondary Antibodies**

Goat Anti Mouse IgG (STAR77...) HRP

Rabbit Anti Mouse IgG (STAR12...) RPE

Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP

Goat Anti Mouse IgG (STAR76...) RPE

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

Rabbit Anti Mouse IgG (STAR13...) HRP
Rabbit Anti Mouse IgG (STAR9...) FITC

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

DyLight®650, DyLight®680, DyLight®800,

FITC, HRP

Goat Anti Mouse IgG (STAR70...) FITC

## **Recommended Negative Controls**

### MOUSE IgG2a NEGATIVE CONTROL (MCA929)

 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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M421851:230731'

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