

## Datasheet: MCA2265

<b>Description:</b>	MOUSE ANTI HUMAN CD289
<b>Specificity:</b>	CD289
<b>Other names:</b>	TLR9
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	5G5
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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 [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

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

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 as a guide only. It is recommended that the user titrates the antibody for use in their own system using the appropriate negative/positive controls.

**(1) Membrane permeabilisation is required for this application. Bio-Rad recommends the use of Leucoperm™ (Product Code [BUF09](#)) for this purpose.**

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	Reacts with: Mouse, Dog <b>N.B.</b> Antibody reactivity and working conditions may vary between species.
<b>Product Form</b>	Purified IgG - liquid
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml
<b>Immunogen</b>	Fusion protein of human TLR9 (amino acids 1-815).

**External Database  
Links**

**UniProt:**

[Q9NR96](#)   [Related reagents](#)

**Entrez Gene:**

[54106](#)   TLR9   [Related reagents](#)

---

**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 10ul of the suggested working dilution to label 1x10<sup>6</sup> cells in 100ul.

---

**Western Blotting**

MCA2265 detects a band of approximately 170-180 kDa in RAW264 cell lysates.

---

**References**

1. Ahmad-Nejad, P. *et al.* (2002) Bacterial CpG-DNA and lipopolysaccharides activate Toll-like receptors at distinct cellular compartments. [Eur J Immunol. 32 \(7\): 1958-68.](#)
2. Batsford, S. *et al.* (2011) Protein level expression of Toll-like receptors 2, 4 and 9 in renal disease. [Nephrol Dial Transplant. 26 \(4\): 1413-6.](#)
3. 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. [J Neuroinflammation. 9: 226.](#)

---

**Storage**

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

---

**Shelf Life**

18 months from date of despatch.

---

**Health And Safety  
Information**

Material Safety Datasheet documentation #10041 available at:  
10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

---

**Regulatory**

For research purposes only

---

## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)   [RPE](#)

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

Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@549](#),  
[DyLight@649](#), [DyLight@680](#), [DyLight@800](#),  
[FITC](#), [HRP](#)

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

Goat Anti Mouse IgG (STAR77...) [HRP](#)

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)

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

Rabbit Anti Mouse IgG (STAR8...) [DyLight@800](#)

Goat Anti Mouse IgG (STAR70...) [FITC](#)

Human Anti Mouse IgG2a (HCA037...) [FITC](#), [HRP](#)

Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

## **Recommended Negative Controls**

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

'M259531:141008'

**Printed on 01 May 2018**

---

© 2018 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)