

Datasheet: MCA2265GA

Description:	MOUSE ANTI HUMAN CD289
Specificity:	CD289
Other names:	TLR9
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	5G5
Isotype:	IgG2a
Quantity:	0.1 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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry (1)	■			1/10 - 1/50
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.**

Target Species	Human
Species Cross Reactivity	Reacts with: Mouse, Dog N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 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](#)

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 1×10^6 cells in 100ul.

Western Blotting

MCA2265GA 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 America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: 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	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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