

Datasheet: MCA5972GA

BATCH NUMBER 150890

Description:	MOUSE ANTI PIG CD335
Specificity:	CD335
Other names:	NKp46
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	VIV-KM1
Isotype:	IgG1
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	▪			1/50 - 1/200
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Immunofluorescence	▪			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system to a concentration equivalent to their test reagent.

Target Species	Pig
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Fusion protein consisting of the extracellular region of porcine CD335
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the SP2/0 myeloma cell line
Specificity	<p>Mouse anti Pig CD335 antibody, clone VIV-KM1 recognizes the porcine homologue of human CD335, also known as NKp46 and natural cytotoxicity triggering receptor 1 (NCR1), a member of the natural cytotoxicity receptor (NCR) family.</p> <p>CD335 is a type I transmembrane protein, with two extracellular C2-type immunoglobulin-like domains, which functions as an activating receptor and is involved in the control of viral infection and tumor development.</p> <p>Until recently little has been known about porcine and veterinary NK cells. CD335 is expressed by human natural killer cells (Sivori, S. et al.1997) and the development of monoclonal antibodies to bovine CD335 (clone ASK1) (Storset et al. 2004) and ovine CD335 (clone EC1.1) (Connelley et al.2011) have enabled researchers to identify and better understand ruminant NK cells. Clone VIV-KM1 is the first monoclonal developed to specifically identify porcine CD335 and provides a reagent to facilitate a better understanding of the pig immune system and aid in the understanding of the role of NK cells in host pathogen defense. Studies using VIV-KM1 have shown that, within the pig, CD335 is not universally expressed by all NK cells and that expression of this marker on NK cells may be influenced by cytokine production (Mair et al. 2012).</p> <p>In addition to clone VIV-KM1, clones AKS1, which recognizes CD335 (NKp46) in bovine and other ruminants, and EC1.1, which recognizes ovine and caprine CD335, are also available from Bio-Rad.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
References	<ol style="list-style-type: none"> 1. Forberg, H. et al. (2014) Early responses of natural killer cells in pigs experimentally infected with 2009 pandemic H1N1 influenza A virus. PLoS One. 9 (6): e100619. 2. Mair, K.H. et al. (2013) Porcine CD8αdim/-NKp46high NK cells are in a highly activated state. Vet Res. 44: 13. 3. Mair, K.H. et al. (2012) NKp46 expression discriminates porcine NK cells with different functional properties. Eur J Immunol. 42 (5): 1261-71. 4. Yang, G. et al. (2017) Characterizing porcine invariant natural killer T cells: A comparative study with NK cells and T cells. Dev Comp Immunol. 76: 343-51.
Further Reading	<ol style="list-style-type: none"> 1. Connelley, T. et al. (2011) NKp46 defines ovine cells that have characteristics corresponding to NK cells. Vet Res. 42: 37. 2. Storset, A.K. et al. (2004) NKp46 defines a subset of bovine leukocytes with natural killer cell characteristics. Eur J Immunol. 34 (3): 669-76.

3. Sivori, S. *et al.* (1997) p46, a novel natural killer cell-specific surface molecule that mediates cell activation. [J Exp Med. 186 \(7\): 1129-36.](#)

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
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA5972GA10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

Recommended Useful Reagents

[RAT ANTI HUMAN CD3:Pacific Blue® \(MCA1477PB\)](#)
[RAT ANTI HUMAN CD3:Alexa Fluor®647 \(MCA1477A647\)](#)
[MOUSE ANTI PIG CD3:FITC \(MCA5951F\)](#)
[MOUSE ANTI PIG CD3:RPE \(MCA5951PE\)](#)
[MOUSE ANTI PIG CD25 \(MCA1736GA\)](#)
[MOUSE ANTI PIG CD45:FITC \(MCA1222F\)](#)
[MOUSE ANTI PIG wCD8 ALPHA:RPE \(MCA1223PE\)](#)
[MOUSE ANTI PIG CD107a:Alexa Fluor® 647 \(MCA2315A647\)](#)
[MOUSE ANTI PIG CD107a:FITC \(MCA2315F\)](#)

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
----------------------------------	---	------------------	---	---------------	---

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

'M368551:200529'

Printed on 19 Jan 2024

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)