

Datasheet: MCA5938PE

Description:	RAT ANTI MOUSE CD335:RPE
Specificity:	CD335
Other names:	NKp46
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	29A1.4
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	▪			1/2 - 1/5
Functional Assays (1)			▪	

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) **Bio-Rad recommends the use of [MCA5938EL](#) for functional assays.**

Target Species	Mouse						
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - liquid						
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>RPE 488nm laser</td> <td>496</td> <td>578</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	RPE 488nm laser	496	578
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
RPE 488nm laser	496	578					
Buffer Solution	Phosphate buffered saline						
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)						
Approx. Protein Concentrations	IgG concentration 0.2mg/ml						
Immunogen	NKP46-IgG1 Fc fusion protein.						
External Database Links	UniProt: Q8C567 Related reagents						

Entrez Gene:

[17086](#) Ncr1 [Related reagents](#)

Synonyms

Ly94

Specificity

Rat anti Mouse CD335 antibody, clone 29A1.4 recognizes natural killer cell p46-related protein (NKp46), otherwise known as CD335, which is uniquely expressed by resting and activated natural killer (NK) cells, but no expression of CD335 has been detected on B cells, T cells, monocytes or granulocytes.

It is a major NK cell lysis receptor for autologous pathogen-infected and tumor target cells during natural cytotoxicity responses. Ligands of CD335 include viral hemagglutinins (HAs) and heparan sulfate proteoglycans (HSPGs) on the surface of tumor cells.

Staining with Rat anti mouse CD335 (29A1.4) is not strain specific and the antibody has been used to stain C57BL/6, SJL, CBA/CA and BALB/c strains. Clone 29A1.4 also activates NK cells *in vitro*. It does not deplete NK cells *in vivo*.

Flow Cytometry

Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.

References

1. Walzer, T. *et al.* (2007) Identification, activation, and selective *in vivo* ablation of mouse NK cells via NKp46. [Proc Natl Acad Sci U S A. 104: 3384-9.](#)
2. Walzer, T. *et al.* (2007) Natural killer cell trafficking *in vivo* requires a dedicated sphingosine 1-phosphate receptor. [Nat Immunol. 8 \(12\): 1337-44.](#)
3. Luci, C. *et al.* (2009) Influence of the transcription factor RORgammat on the development of NKp46+ cell populations in gut and skin. [Nat Immunol. 10: 75-82.](#)
4. Chiossone, L. *et al.* (2009) Maturation of mouse NK cells is a 4-stage developmental program. [Blood. 113: 5488-96.](#)

Storage

Store at +4°C. DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

Guaranteed for 12 months from the date of despatch or until the date of expiry, whichever comes first. Please see label for expiry date.

Health And Safety Information

Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:RPE \(MCA1212PE\)](#)

Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

MOUSE SEROBLOCK FcR (BUF041B)

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