

Datasheet: MCA2368PE

Description:	MOUSE ANTI HUMAN FC EPSILON R1 ALPHA:RPE
Specificity:	Fc EPSILON R1 ALPHA
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	9E1
Isotype:	IgG2b
Quantity:	100 TESTS

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	▪			Neat

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.

Target Species	Human		
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
Reconstitution	Reconstitute with 1.0 ml distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% sodium azide (NaN ₃)		
Stabilisers	1% bovine serum albumin 5% sucrose		

**External Database
Links**

UniProt:

[P12319](#) [Related reagents](#)

Entrez Gene:

[2205](#) FCER1A [Related reagents](#)

Synonyms

FCE1A

RRID

AB_616857

Fusion Partners

Spleen cells from immunized Balb/c mice were fused with cells of the Sp2/0-Ag14 myeloma cell line.

Specificity

Mouse anti Human Fc epsilon R1 alpha antibody, clone 9E1 recognizes the human high affinity Fc receptor for IgE (Fc epsilon R1), which plays a central role in the IgE-mediated allergic response. Fc epsilon R1 consists of four subunits, a high affinity IgE binding alpha subunit, a beta chain and two di-sulphide linked gamma subunits. Clone 9E1 specifically recognizes the extracellular D1 domain of the Fc epsilon R1 alpha chain.

Fc epsilon R1 is primarily expressed on mast cells and basophils but expression of Fc epsilon R1 has also been reported on monocytes, Langerhans cells and dendritic cells from patients with atopic diseases.

Flow Cytometry

Use 10µl of the suggested working dilution to label 10⁶ cells in 100µl.

References

1. Vangelista, L. *et al.* (2002) A minimal receptor-Ig chimera of human FcepsilonRI alpha-chain efficiently binds secretory and membrane IgE. [Protein Eng. 15 \(1\): 51-7.](#)
2. Vangelista, L. *et al.* (2002) Efficient folding of the FcepsilonRI alpha-chain membrane-proximal domain D2 depends on the presence of the N-terminal domain D1. [J Mol Biol. 322 \(4\): 815-25.](#)
3. Vangelista, L. *et al.* (2005) Membrane IgE binds and activates Fc epsilon RI in an antigen-independent manner. [J Immunol. 174 \(9\): 5602-11.](#)
4. Gschwandtner, M. *et al.* (2018) The Reticulum-Associated Protein RTN1A Specifically Identifies Human Dendritic Cells. [J Invest Dermatol. 138 \(6\): 1318-27.](#)

Storage

Prior to reconstitution store at +4°C.
After reconstitution store at +4°C.
DO NOT FREEZE.
This product is photosensitive and should be protected from light. 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 #20487 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA2368PE>
20487

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL:RPE \(MCA691PE\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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

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