

Datasheet: MCA6122PE

Description:	MOUSE ANTI HUMAN CD158d:RPE
Specificity:	CD158d
Other names:	KIR2DL4
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	mAb#33
Isotype:	IgG1
Quantity:	100 TESTS/2ml

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) - liquid		
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 Stabilisers	<0.1% Sodium Azide (NaN ₃) 0.2% Bovine Serum Albumin		
Immunogen	NK3.3 cells and KIR2DL4-Ig fusion protein		

**External Database
Links**

UniProt:

[Q99706](#) [Related reagents](#)

Entrez Gene:

[3805](#) KIR2DL4 [Related reagents](#)

Synonyms

CD158D, KIR103AS

Specificity

Mouse anti Human CD158d, clone mAb#33, recognizes the extracellular portion of CD158d also known as Killer Cell Immunoglobulin-like Receptor, 2 domains, long cytoplasmic tail, 4 (KIR2DL4). CD158d is a 45 kDa natural killer (NK) cell marker, although cell surface expression and function depends on the genotype of particular individuals. As some individual have no detectable CD158d on the surface of resting NK cells. In some individuals surface levels of CD158d can increase upon stimulation by IL-2 ([Kikuchi-Maki et a. 2003](#)). The killer cell Ig-like receptor protein regulates the responsiveness of NK cells upon their contact with tumor cells, virus infected cells, cytokines and chemokines. CD158d is constitutively expressed by NK cells and recognizes major histocompatibility complex (MHC) class I molecules on target cells. The non-classical MHC class I molecule HLA-G is the only known ligand of CD158d ([Rahagioakab & Long 1999](#)).

CD158d contains two Ig domains and a single tyrosine based inhibition motif in the cytoplasmic domain. It also contains a charged arginine near the top of the transmembrane region which helps regulate the signal for cytotoxicity and cytokine secretion when engaged at the cell surface. These two features give CD158d both inhibitory and activating characteristics ([Fauve & Long 2002](#)).

This mAb#33 clone has been used in flow cytometry to examine CD158d levels upon infection of human extravillous cytotrophoblast cells with *Toxoplasma gondii* ([Xu et al. 2013](#)).

Purity

>95% by SDS PAGE

Flow Cytometry

Use 20ul of the undiluted reagent to label 1×10^6 cells in 100ul

Storage

Store at +4°C. DO NOT FREEZE.

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

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 #10041 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA6122PE>
10041

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

North & South Tel: +1 800 265 7376

America 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

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

'M401920:220718'

Printed on 12 Aug 2023

© 2023 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)