Datasheet: MCA2243F

Description:	MOUSE ANTI HUMAN KIR:FITC
Specificity:	KIR
Other names:	KILLER CELL IMMUNOGLOBIN-LIKE RECEPTORS
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	NKVFS1
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	▪			Neat - 1/5

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 appropriate negative/positive controls.

Target Species

Human

Product Form

Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide
1% Bovine Serum Albumin

Approx. Protein Concentrations

IgG concentration 0.1 mg/ml

External Database Links

UniProt:

P43626 Related reagents
P43627 Related reagents
P43628 Related reagents

Q14954		Related reagents
P43631		Related reagents
P43632		Related reagents

Entrez Gene:

3802	KIR2DL1	Related reagents
3803	KIR2DL2	Related reagents
3804	KIR2DL3	Related reagents
3806	KIR2DS1	Related reagents
3809	KIR2DS4	Related reagents
100132285	KIR2DS2	Related reagents

Synonyms

CD158A, CD158B1, CD158B2, CD158H, CD158I, CD158J, KIRCL23, KKA3, NKAT1, NKAT2, NKAT5, NKAT6, NKAT8

Specificity

Mouse anti Human KIR antibody, clone NKVFS1 recognizes KIR2D members of the killer cell immunoglobulin (Ig)-like receptor (KIR) family, CD158a, CD158b and P50.3. KIR2D family members are cell surface glycoproteins with two Ig domains, which are expressed on natural killer cells and some T cells.

Mouse anti Human KIR antibody, clone NKVFS1 recognizes the long and short forms CD158a and CD158b (KIR2DL, KIR2DS1 and KIR2DS2 respectively) and also p50.3 (KIR2DS4).

Mouse anti Human KIR antibody, clone NKVFS1 is reported to have functional activity, activating NK cell cytotoxicity via KIR2DS and inhibiting via KIR2DL forms..

Flow Cytometry

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

References

1. Spaggiari, G.M. *et al.* (2002) Soluble HLA class I molecules induce natural killer cell apoptosis through the engagement of CD8: evidence for a negative regulation exerted by members of the inhibitory receptor superfamily. Blood. 99 (5): 1706-14.
2. Spaggiari, G.M. *et al.* (2002) Soluble HLA class I induces NK cell apoptosis upon the engagement of killer-activating HLA class I receptors through FasL-Fas interaction. Blood. 100 (12): 4098-107.
3. Older Aguilar, A.M. *et al.* (2010) Coevolution of killer cell Ig-like receptors with HLA-C to become the major variable regulators of human NK cells. J Immunol. 185 (7): 4238-51.
4. Patterson, S. *et al.* (2008) Human invariant NKT cells display alloreactivity instructed by invariant TCR-CD1d interaction and killer Ig receptors. J Immunol. 181 (5): 3268-76.
5. Hilton, H.G. *et al.* (2015) The production of KIR-Fc fusion proteins and their use in a multiplex HLA class I binding assay. J Immunol Methods. 425: 79-87.
6. Moesta, A.K. *et al.* (2009) Chimpanzees use more varied receptors and ligands than humans for inhibitory killer cell Ig-like receptor recognition of the MHC-C1 and MHC-C2 epitopes. J Immunol. 182 (6): 3628-37.
7. VanDerPloeg, K. *et al.* (2017) Modulation of Human Leukocyte Antigen-C by Human Cytomegalovirus Stimulates KIR2DS1 Recognition by Natural Killer Cells. Front Immunol. 8: 298.
8. Wang, Y. *et al.* (2009) Characteristics of expanded CD4+CD28null T cells in patients with chronic hepatitis B. Immunol Invest. 38 (5): 434-46.

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. 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.
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 Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

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

'M302035:170109'

Printed on 05 May 2018