

Datasheet: MCA2243

### **BATCH NUMBER 1603**

Description:	MOUSE ANTI HUMAN KIR
Specificity:	KIR
Other names:	KILLER CELL IMMUNOGLOBIN-LIKE RECEPTORS
Format:	Purified
<b>Product Type:</b>	Monoclonal Antibody
Clone:	NKVFS1
Isotype:	lgG1
Quantity:	0.2 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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	•			1/50 - 1/100
Immunohistology - Frozen				
Immunohistology - Paraffin				
ELISA	•			
Immunoprecipitation				
Western Blotting	•			

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 - liquid	
Preparation	Purified IgG prepared by affinity chromatography on Protein (supernatant	G from tissue culture
Buffer Solution	Phosphate buffered saline	
Preservative Stabilisers	0.09% Sodium Azide	

Carrier Free	Yes		
Approx. Protein Concentrations	IgG concentration 1.0 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		
RRID	AB_2130355		
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 <sup>6</sup> cells in 100ul.		
References	1. Spaggiari, G.M. <i>et al.</i> (2002) Soluble HLA class I molecules induce natural killer cell apoptosis through the engagement of CD8: evidence for a negative regulation exerted I members of the inhibitory receptor superfamily. <u>Blood. 99 (5): 1706-14.</u> 2. Spaggiari, G.M. <i>et al.</i> (2002) Soluble HLA class I induces NK cell apoptosis upon the engagement of killer-activating HLA class I receptors through FasL-Fas interaction. <u>Blood (12): 4098-107.</u>	)	

- 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. <u>J Immunol. 182 (6): 3628-37.</u>
- 7. Van Der Ploeg, K. *et al.* (2017) Modulation of Human Leukocyte Antigen-C by Human Cytomegalovirus Stimulates KIR2DS1 Recognition by Natural Killer Cells. <u>Front Immunol.</u> 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.
- 9. Wijaya, R.S. *et al.* (2020) Expansion of dysfunctional CD56-CD16+ NK cells in chronic hepatitis B patients. Liver Int. Dec 23 [Epub ahead of print].

#### **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: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2243">https://www.bio-rad-antibodies.com/SDS/MCA2243</a> 10040
Regulatory	For research purposes only

## Related Products

# **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12...)

Goat Anti Mouse IgG IgA IgM (STAR87...)

RPE

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)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M366424:200529'

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