

Datasheet: MCA2243

**BATCH NUMBER 1603**

|                      |                                         |
|----------------------|-----------------------------------------|
| <b>Description:</b>  | MOUSE ANTI HUMAN KIR                    |
| <b>Specificity:</b>  | KIR                                     |
| <b>Other names:</b>  | KILLER CELL IMMUNOGLOBIN-LIKE RECEPTORS |
| <b>Format:</b>       | Purified                                |
| <b>Product Type:</b> | Monoclonal Antibody                     |
| <b>Clone:</b>        | NKVFS1                                  |
| <b>Isotype:</b>      | IgG1                                    |
| <b>Quantity:</b>     | 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 [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

|                            | 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.

|                                 |                                                                                               |
|---------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Target Species</b>           | Human                                                                                         |
| <b>Product Form</b>             | Purified IgG - liquid                                                                         |
| <b>Preparation</b>              | Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant |
| <b>Buffer Solution</b>          | Phosphate buffered saline                                                                     |
| <b>Preservative Stabilisers</b> | 0.09% Sodium Azide                                                                            |

Carrier Free Yes

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Approx. Protein Concentrations IgG concentration 1.0 mg/ml

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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](#)

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

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RRID AB\_2130355

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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..

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Flow Cytometry Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.

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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. Van Der Ploeg, 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.](#)
9. Wijaya, R.S. *et al.* (2020) Expansion of dysfunctional CD56-CD16+ NK cells in chronic hepatitis B patients. [Liver Int. Dec 23 \[Epub ahead of print\].](#)

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**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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2243>  
10040

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

|                                         |                                                                                                                                                                                                                                     |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Goat Anti Mouse IgG (STAR77...)         | <a href="#">HRP</a>                                                                                                                                                                                                                 |
| Rabbit Anti Mouse IgG (STAR12...)       | <a href="#">RPE</a>                                                                                                                                                                                                                 |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | <a href="#">Alk. Phos.</a> , <a href="#">HRP</a>                                                                                                                                                                                    |
| Goat Anti Mouse IgG (STAR76...)         | <a href="#">RPE</a>                                                                                                                                                                                                                 |
| Goat Anti Mouse IgG (Fc) (STAR120...)   | <a href="#">FITC</a> , <a href="#">HRP</a>                                                                                                                                                                                          |
| Rabbit Anti Mouse IgG (STAR13...)       | <a href="#">HRP</a>                                                                                                                                                                                                                 |
| Goat Anti Mouse IgG (STAR70...)         | <a href="#">FITC</a>                                                                                                                                                                                                                |
| Goat Anti Mouse IgG (H/L) (STAR117...)  | <a href="#">Alk. Phos.</a> , <a href="#">DyLight@488</a> , <a href="#">DyLight@550</a> ,<br><a href="#">DyLight@650</a> , <a href="#">DyLight@680</a> , <a href="#">DyLight@800</a> ,<br><a href="#">FITC</a> , <a href="#">HRP</a> |
| Rabbit Anti Mouse IgG (STAR9...)        | <a href="#">FITC</a>                                                                                                                                                                                                                |

## Recommended Negative Controls

### MOUSE IgG1 NEGATIVE CONTROL (MCA928)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto: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](mailto: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](https://bio-rad-antibodies.com/datasheets)

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