

## Datasheet: MCA2242F

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|----------------------|-----------------------------|
| <b>Description:</b>  | MOUSE ANTI HUMAN CD305:FITC |
| <b>Specificity:</b>  | CD305                       |
| <b>Other names:</b>  | LAIR-1                      |
| <b>Format:</b>       | FITC                        |
| <b>Product Type:</b> | Monoclonal Antibody         |
| <b>Clone:</b>        | NKTA255                     |
| <b>Isotype:</b>      | IgG1                        |
| <b>Quantity:</b>     | 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](http://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.

|                                       |   |                            |                          |
|---------------------------------------|---|----------------------------|--------------------------|
| <b>Target Species</b>                 | Human   |                            |                          |
| <b>Product Form</b>                   | Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid                |                            |                          |
| <b>Max Ex/Em</b>                      | <b>Fluorophore</b>  | <b>Excitation Max (nm)</b> | <b>Emission Max (nm)</b> |
|                                       | FITC  | 490                        | 525                      |
| <b>Preparation</b>                    | Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant |                            |                          |
| <b>Buffer Solution</b>                | Phosphate buffered saline   |                            |                          |
| <b>Preservative</b>                   | 0.09% sodium azide (NaN <sub>3</sub> )  |                            |                          |
| <b>Stabilisers</b>                    | 1% bovine serum albumin   |                            |                          |
| <b>Approx. Protein Concentrations</b> | IgG concentration 0.1 mg/ml   |                            |                          |

|                                |   |
|--------------------------------|---|
| <b>Immunogen</b>               | NK cell lines B12.100 and AM.25   |
| <b>External Database Links</b> | <p><b>UniProt:</b><br/> <a href="#">Q6GTX8</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">3903</a>    LAIR1    <a href="#">Related reagents</a></p>  |
| <b>Synonyms</b>                | CD305   |
| <b>RRID</b>                    | AB_323554   |
| <b>Fusion Partners</b>         | Spleen cells from immunized mice were fused with cells of the P3U1 myeloma cell line  |
| <b>Specificity</b>             | <p><b>Mouse anti Human CD305 antibody, clone NKTA255</b> recognizes human leukocyte-associated Ig-like receptor-1 (LAIR-1), a ~40 kDa cell surface molecule that functions as an inhibitory receptor on natural killer cells, monocytes and T cells. LAIR-1, otherwise known as CD305, is also expressed by other hematopoietic cells including B cells, but is not expressed by non-haematopoietic, platelets or erythrocytes.</p> <p>Mouse anti Human CD305 antibody, clone NKTA255 is reported to inhibit NK cell triggering via CD16 molecules (<a href="#">Poggi et al. 1995</a>).</p>   |
| <b>Flow Cytometry</b>          | Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl  |
| <b>References</b>              | <ol style="list-style-type: none"> <li>1. Poggi, A. <i>et al.</i> (1997) p40 molecule regulates NK cell activation mediated by NK receptors for HLA class I antigens and TCR-mediated triggering of T lymphocytes. <a href="#">Int Immunol. 9 (9): 1271-9.</a></li> <li>2. Poggi, A. <i>et al.</i> (2000) Engagement of the leukocyte-associated Ig-like receptor-1 induces programmed cell death and prevents NF-kappaB nuclear translocation in human myeloid leukemias. <a href="#">Eur J Immunol. 30 (10): 2751-8.</a></li> <li>3. Zocchi, M.R. <i>et al.</i> (2001) Leukocyte-associated Ig-like receptor-1 prevents granulocyte-monocyte colony stimulating factor-dependent proliferation and Akt1/PKB alpha activation in primary acute myeloid leukemia cells. <a href="#">Eur J Immunol. 31 (12): 3667-75.</a></li> <li>4. Poggi, A. <i>et al.</i> (2008) Lack of the leukocyte-associated Ig-like receptor-1 expression in high-risk chronic lymphocytic leukaemia results in the absence of a negative signal regulating kinase activation and cell division. <a href="#">Leukemia. 22 (5): 980-8.</a></li> </ol> |
| <b>Further Reading</b>         | 1. Meyaard, L. (2008) The inhibitory collagen receptor LAIR-1 (CD305). <a href="#">J Leukoc Biol. 83 (4): 799-803.</a>  |
| <b>Storage</b>                 | <p>This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be</p>  |

protected from light.

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| <b>Guarantee</b> | 12 months from date of despatch |
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| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10041 available at:<br><a href="https://www.bio-rad-antibodies.com/SDS/MCA2242F">https://www.bio-rad-antibodies.com/SDS/MCA2242F</a><br>10041 |
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|-------------------|----------------------------|
| <b>Regulatory</b> | For research purposes only |
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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

### Recommended Useful Reagents

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

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

|                                  |   |                  |   |               |   |
|----------------------------------|---|------------------|---|---------------|---|
| <b>North &amp; South America</b> | Tel: +1 800 265 7376<br>Fax: +1 919 878 3751<br>Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a> | <b>Worldwide</b> | Tel: +44 (0)1865 852 700<br>Fax: +44 (0)1865 852 739<br>Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a> | <b>Europe</b> | Tel: +49 (0) 89 8090 95 21<br>Fax: +49 (0) 89 8090 95 50<br>Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a> |
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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](https://bio-rad-antibodies.com/datasheets)  
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