

Datasheet: MCA2242F

BATCH NUMBER 1808

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| Description: | MOUSE ANTI HUMAN CD305:FITC |
| Specificity: | CD305 |
| Other names: | LAIR-1 |
| Format: | FITC |
| Product Type: | Monoclonal Antibody |
| Clone: | NKTA255 |
| 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 |

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 | <table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>FITC</td> <td>490</td> <td>525</td> </tr> </tbody> </table> | Fluorophore | Excitation Max (nm) | Emission Max (nm) | FITC | 490 | 525 |
| Fluorophore | Excitation Max (nm) | Emission Max (nm) | | | | | |
| FITC | 490 | 525 | | | | | |
| Preparation | Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant | | | | | | |
| Buffer Solution | Phosphate buffered saline | | | | | | |
| Preservative | 0.09% Sodium Azide | | | | | | |
| Stabilisers | 1% Bovine Serum Albumin | | | | | | |
| Approx. Protein | IgG concentration 0.1 mg/ml | | | | | | |

Concentrations

Immunogen NK cell lines B12.100 and AM.25

External Database Links

UniProt:

[Q6GTX8](#) [Related reagents](#)

Entrez Gene:

[3903](#) LAIR1 [Related reagents](#)

Synonyms CD305

RRID AB_323554

Fusion Partners Spleen cells from immunised mice were fused with cells of the P3U1 myeloma cell line

Specificity **Mouse anti Human CD305 antibody, clone NKTA255** 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.

Mouse anti Human CD305 antibody, clone NKTA255 is reported to inhibit NK cell triggering via CD16 molecules ([Poggi *et al.* 1995](#)).

Flow Cytometry Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

References

1. Poggi, A. *et al.* (2000) Engagement of the leukocyte-associated Ig-like receptor-1 induces programmed cell death and prevents NF-kappaB nuclear translocation in human myeloid leukemias. [Eur J Immunol. 30 \(10\): 2751-8.](#)
2. Zocchi, M.R. *et al.* (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. [Eur J Immunol. 31 \(12\): 3667-75.](#)
3. Poggi, A. *et al.* (1997) p40 molecule regulates NK cell activation mediated by NK receptors for HLA class I antigens and TCR-mediated triggering of T lymphocytes. [Int Immunol. 9 \(9\): 1271-9.](#)
4. Poggi, A. *et al.* (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. [Leukemia. 22 \(5\): 980-8.](#)

Further Reading 1. Meyaard, L. (2008) The inhibitory collagen receptor LAIR-1 (CD305). [J Leukoc Biol. 83 \(4\): 799-803.](#)

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.

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| Guarantee | 12 months from date of despatch |
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| Health And Safety Information | Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2242F 10041 |
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|-------------------|----------------------------|
| Regulatory | For research purposes only |
|-------------------|----------------------------|

Related Products

Recommended Negative Controls

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

Recommended Useful Reagents

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

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

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|----------------------------------|---|------------------|---|---------------|---|
| 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 |
|----------------------------------|---|------------------|---|---------------|---|

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)
'M366420:200529'

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