

Datasheet: MCA2242A647

Description:	MOUSE ANTI HUMAN CD305:Alexa Fluor® 647
Specificity:	CD305
Other names:	LAIR-1
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	NKTA255
Isotype:	lgG1
Quantity:	100 TESTS/1ml

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 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.

Target Species	Human		
Product Form	Purified IgG conjugate	ed to Alexa Fluor® 64	7 - liquid
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nn
	Alexa Fluor®647	650	665
Preparation Buffer Solution	Purified IgG prepared supernatant Phosphate buffered sa	. , .	raphy on Protein A
Preservative	0.09% sodium azide (NaN _a)	
Stabilisers	1% bovine serum albu	· ·	
Approx. Protein Concentrations	IgG concentration 0.0	5 mg/ml	

Immunogen

NK cell lines B12.100 and AM.25

External Database Links

UniProt:

Q6GTX8 Related reagents

Entrez Gene:

3903 LAIR1 Related reagents

Synonyms

CD305

Fusion Partners

Spleen cells from immunized 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 (<u>Poggi et al. 1995</u>).

Flow Cytometry

Use 10µl of the suggested working dilution to label 106 cells in 100µl

References

- 1. 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. <u>Int Immunol.</u> 9 (9): 1271-9.
- 2. 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.
- 3. 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.
- 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. <u>Leukemia. 22 (5): 980-8.</u>

Further Reading

1. Meyaard, L. (2008) The inhibitory collagen receptor LAIR-1 (CD305). <u>J Leukoc Biol. 83</u> (4): 799-803.

Storage

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.

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 protected from light.

Guarantee 12 months from date of despatch

Acknowledgements

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Health And Safety Information

Material Safety Datasheet documentation #10041 available at:

 $\underline{\text{https://www.bio-rad-antibodies.com/SDS/MCA2242A647}}$

10041

Regulatory For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL: Alexa Fluor® 647 (MCA928A647)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

Fax: +1 919 878 3751

North & South Tel: +1 800 265 7376

America

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_us@bio-rad.com

Email: antibody_sales_uk@bio-rad.com

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 'M413486;221123'

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