

## Spark PLUS UV395™ anti-human CD1a Antibody

<b>Catalog# / Size</b>	300149 / 25 tests 300150 / 100 tests
<b>Clone</b>	HI149
<b>Regulatory Status</b>	RUO
<b>Workshop</b>	V CD01.01
<b>Other Names</b>	T6, R4
<b>Isotype</b>	Mouse IgG1, $\kappa$
<b>Description</b>	CD1a is a 49 kD member of the immunoglobulin superfamily also known as T6 and R4. It is a type I membrane glycoprotein with structural similarities to MHC class I and is non-covalently associated with $\beta_2$ -microglobulin. CD1a plays a role in non-peptide glycolipid antigen presentation to CD1-restricted T cells. It is expressed on cortical double positive and single positive thymocytes, Langerhans cells, and dendritic cells. In addition to antigen presentation, CD1a has been implicated in thymic T cell development.

### Product Details

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<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with Spark PLUS UV395™ under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our <a href="#">Certificate of Analysis</a> online tool.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is 5 $\mu$ L per million cells in 100 $\mu$ L staining volume or 5 $\mu$ L per 100 $\mu$ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.  * Spark PLUS UV395™ has a maximum excitation of 355 nm and a maximum emission of 385 nm.
<b>Excitation Laser</b>	Ultraviolet Laser (355 nm)
<b>Application Notes</b>	Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections.
<b>Application References</b>	<ol style="list-style-type: none"><li>Schlossman S, <i>et al.</i> Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.</li><li>Knapp W. 1989. Leucocyte Typing IV. Oxford University Press New York.</li><li>Patton KM, <i>et al.</i> 2005. <i>Infect. Immun.</i>73:2083. <a href="#">PubMed</a></li><li>Curti A, <i>et al.</i> 2010. <i>Haematologica.</i> 95:2022. <a href="#">PubMed</a></li></ol>
<b>(PubMed link indicates BioLegend citation)</b>	
<b>RRID</b>	AB_3683297 (BioLegend Cat. No. 300149) AB_3683297 (BioLegend Cat. No. 300150)

## Antigen Details

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<b>Structure</b>	Ig superfamily, MHC I-like molecule, type I transmembrane glycoprotein, 49 kD
<b>Distribution</b>	Cortical thymocytes, Langerhans cells, dendritic cells
<b>Function</b>	Antigen presentation, lymphocyte activation, thymic T cell development
<b>Ligand/Receptor</b>	CD1-restricted TCRs
<b>Cell Type</b>	Dendritic cells, Langerhans cells, Thymocytes
<b>Biology Area</b>	Immunology, Innate Immunity
<b>Molecular Family</b>	CD Molecules
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Blumberg RS, <i>et al.</i> 1995. <i>Immunol. Rev.</i> 147:5.</li><li>2. Calabi F, <i>et al.</i> 1991. <i>Tissue Antigens</i> 37:1.</li><li>3. Melian A, <i>et al.</i> 1996. <i>Curr. Opin. Immunol.</i> 8:82.</li></ol>

**Gene ID** [909](#)

## Related Protocols

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- [Cell Surface Flow Cytometry Staining Protocol](#)

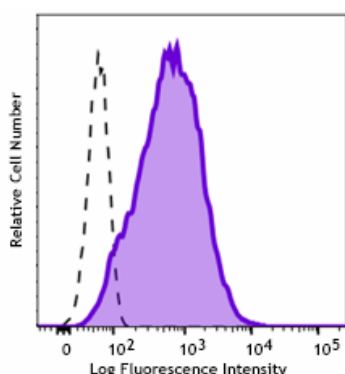
## Other Formats

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FITC anti-human CD1a, PE anti-human CD1a, PE/Cyanine5 anti-human CD1a, APC anti-human CD1a, Purified anti-human CD1a, Biotin anti-human CD1a, Alexa Fluor® 488 anti-human CD1a, Alexa Fluor® 647 anti-human CD1a, Pacific Blue™ anti-human CD1a, Alexa Fluor® 700 anti-human CD1a, Brilliant Violet 421™ anti-human CD1a, PE/Cyanine7 anti-human CD1a, APC/Cyanine7 anti-human CD1a, PerCP/Cyanine5.5 anti-human CD1a, PE/Dazzle™ 594 anti-human CD1a, TotalSeq™-A0402 anti-human CD1a, TotalSeq™-C0402 anti-human CD1a, Brilliant Violet 711™ anti-human CD1a, APC/Fire™ 750 anti-human CD1a, Brilliant Violet 605™ anti-human CD1a, TotalSeq™-B0402 anti-human CD1a, TotalSeq™-D0402 anti-human CD1a, Brilliant Violet 510™ anti-human CD1a, Spark PLUS UV395™ anti-human CD1a

## Product Data

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Human MOLT-4 cells were stained with anti-human CD1a (clone HI149) Spark PLUS UV395™ (filled histogram) or mouse IgG1,  $\kappa$  Spark PLUS UV395™ isotype control (open histogram).

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