

## Brilliant Violet 421™ anti-human CD83 Antibody

<b>Catalog# / Size</b>	305323 / 25 tests 305324 / 100 tests
<b>Clone</b>	HB15e
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	HB15
<b>Isotype</b>	Mouse IgG1, $\kappa$
<b>Description</b>	CD83 is a 43 kD single chain type I glycoprotein also known as HB15. A member of the immunoglobulin superfamily, CD83 is expressed on a subset of dendritic cells, Langerhans cells, and weakly on activated lymphocytes. Although CD83 is thought to play a role in antigen presentation and/or lymphocyte activation, the precise function of this protein is unknown. CD83 is considered to be a useful marker for mature dendritic cells.

### Product Details

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<b>Verified Reactivity</b>	Human
<b>Reported Reactivity</b>	African Green, Baboon, Pigtailed Macaque, Rhesus
<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 Brilliant Violet 421™ under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<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>	<p>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 <math>\mu</math>l per million cells in 100 <math>\mu</math>l staining volume or 5 <math>\mu</math>l per 100 <math>\mu</math>l of whole blood.</p> <p>Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.</p> <p><a href="#">Learn more about Brilliant Violet™.</a></p> <p>This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.</p>
<b>Excitation Laser</b>	Violet Laser (405 nm)
<b>Application Notes</b>	Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections <sup>4</sup> .
<b>Application References</b>	<ol style="list-style-type: none"> <li>Knapp W, <i>et al.</i> 1989. Leucocyte Typing IV. Oxford University Press New York.</li> <li>Zhou L, <i>et al.</i> 1995. <i>J. Immunol.</i> 154:3821.</li> <li>Cao W, <i>et al.</i> 2005. <i>Biochem. J.</i> 385:85.</li> <li>Lore K, <i>et al.</i> 2002. <i>AIDS</i> 16:683. (IHC)</li> </ol>
<b>(PubMed link indicates BioLegend citation)</b>	

## Product Citations

1. Royle C, et al. 2014. *J Immunol*. 193:3538. [PubMed](#)
2. Lombardi M, et al. 2016. *J Leukoc Biol*. 99: 711 - 721. [PubMed](#)
3. Krakow S, et al. 2019. *Front Immunol*. 10:1484. [PubMed](#)
4. Nastasi C, et al. 2015. *Sci Rep*. . [PubMed](#)

## RRID

AB\_10899571 (BioLegend Cat. No. 305323)  
AB\_2561829 (BioLegend Cat. No. 305324)

## Antigen Details

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<b>Structure</b>	Ig superfamily, single chain transmembrane glycoprotein, 43 kD
<b>Distribution</b>	Dendritic cells, Langerhan cells, activated B and T cells
<b>Cell Type</b>	B cells, Dendritic cells, Langerhans cells, T cells
<b>Biology Area</b>	Costimulatory Molecules, Immunology
<b>Molecular Family</b>	CD Molecules
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Kozlow E, et al. 1993. <i>Blood</i> 81:454.</li><li>2. Zhou L, et al. 1992. <i>J. Immunol</i>. 149:735.</li><li>3. Zhou L, et al. 1995. <i>Blood</i> 86:3295.</li></ol>
<b>Gene ID</b>	<a href="#">9308</a>

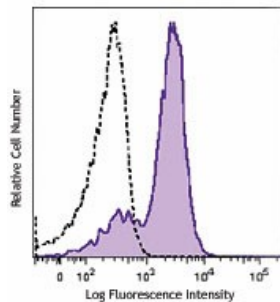
## Other Formats

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APC anti-human CD83, Biotin anti-human CD83, FITC anti-human CD83, PE anti-human CD83, PE/Cyanine5 anti-human CD83, Purified anti-human CD83, Alexa Fluor® 488 anti-human CD83, Alexa Fluor® 647 anti-human CD83, PerCP/Cyanine5.5 anti-human CD83, Brilliant Violet 421™ anti-human CD83, PE/Cyanine7 anti-human CD83, PE/Dazzle™ 594 anti-human CD83, APC/Cyanine7 anti-human CD83, Brilliant Violet 711™ anti-human CD83, APC/Fire™ 750 anti-human CD83, Brilliant Violet 605™ anti-human CD83, Brilliant Violet 785™ anti-human CD83, TotalSeq™-A0359 anti-human CD83, TotalSeq™-C0359 anti-human CD83, TotalSeq™-B0359 anti-human CD83, TotalSeq™-D0359 anti-human CD83

## Product Data

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Human monocyte-derived dendritic cells (induced with GM-CSF+IL-4+TNF- $\alpha$ ) were stained with CD83 (clone HB15e) Brilliant Violet 421™ (filled histogram) or mouse IgG1,  $\kappa$  Brilliant Violet 421™ isotype control (open histogram).

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