

## Brilliant Violet 421™ anti-human CD338 (ABCG2) Antibody

<b>Catalog# / Size</b>	332029 / 25 tests 332030 / 100 tests
<b>Clone</b>	5D3
<b>Regulatory Status</b>	RUO
<b>Workshop</b>	HCDM listed
<b>Other Names</b>	ABCG2, CDw338, Bcrp1, MXR
<b>Isotype</b>	Mouse IgG2b, κ
<b>Description</b>	CD338, known as ABCG2 (BCRP1), is a multi-drug resistance (MDR) family protein that is a member of ATP binding cassette (ABC) transporters. It is highly expressed on primitive 'side population' (SP) stem cells. This SP phenotype is based on the efflux of fluorescent dyes such as Rhodamine 123 and Hoechst 33342. The SP cells express low or undetectable levels of CD34. In the bone marrow, about 0.05% population of cells displays the low fluorescence and are highly enriched for repopulating cells. The highest levels of BCRP1 mRNA expression have been seen in KDR+ human stem cells. The expression of ABCG2 appears to be highly conserved as it has been identified in various species.

### 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 Brilliant Violet 421™ 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>	<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 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.</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>	This clone is listed under the following US Patent Numbers:

6,313,277; 7,541,437; 7,655,755; 7,741,455

#### Application References

(PubMed link indicates BioLegend citation)

1. Matalia H, 2012. *Br J Ophthalmol*. [PubMed](#)
2. Zhou S, *et al.* 2001. *Nat. Med.* 7:1028. (FC)
3. Abbott BL, *et al.* 2002. *Blood* 100:4594. (FC)
4. Huang FF, *et al.* 2104. *PLoS One*. 9:88298. [PubMed](#)

#### RRID

AB\_3683347 (BioLegend Cat. No. 332029)  
AB\_3683347 (BioLegend Cat. No. 332030)

## Antigen Details

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#### Distribution

primitive 'sidepopulation' (SP) stem cells, KDR+ human stem cells

#### Cell Type

Embryonic Stem Cells, Hematopoietic stem and progenitors, Neural Stem Cells

#### Biology Area

Cell Biology, Immunology, Neuroscience, Neuroscience Cell Markers, Stem Cells

#### Molecular Family

CD Molecules

#### Antigen References

1. Kim M, *et al.* 2002. *Clin. Cancer Res.* 8:228.
2. Scharenber CW, *et al.* 2002. *Blood* 99:50712.
3. Goodell MA, *et al.* 1997. *Nat. Med.* 3:133745.
4. Bunting KD. 2002. *Stem Cells*. 20:11.

#### Gene ID

[9429](#)

## Related Protocols

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

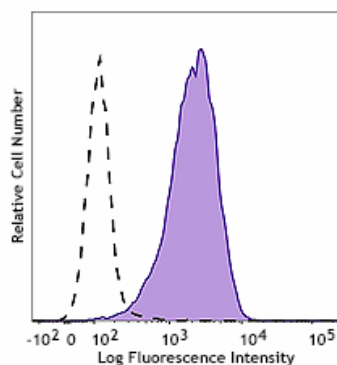
## Other Formats

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PE anti-human CD338 (ABCG2), FITC anti-human CD338 (ABCG2), APC anti-human CD338 (ABCG2), PerCP/Cyanine5.5 anti-human CD338 (ABCG2), PE/Cyanine7 anti-human CD338 (ABCG2), TotalSeq™-C0569 anti-human CD338 (ABCG2), Brilliant Violet 421™ anti-human CD338 (ABCG2) Antibody, Brilliant Violet 605™ anti-human CD338 (ABCG2) Antibody

## Product Data

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Human ABCG2-transfected K562 cells were stained with anti-human CD338 (ABCG2) (clone 5D3) Brilliant Violet 421™ (filled histogram) or mouse IgG2b, κ Brilliant Violet 421™ isotype control (open histogram).

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