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

Catalog# / Size	332029 / 25 tests 332030 / 100 tests
Clone	5D3
Regulatory Status	RUO
Workshop	HCDM listed
Other Names	ABCG2, CDw338, Bcrp1, MXR
Isotype	Mouse IgG2b, κ
Description	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

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. **Do not freeze**.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. 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. 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. Learn more about Brilliant Violet™. 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.
Excitation Laser	Violet Laser (405 nm)
Application Notes	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. 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

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

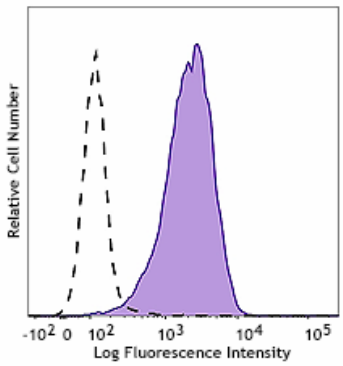
Related Protocols

- Cell Surface Flow Cytometry Staining Protocol

Other Formats

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



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).

8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587