

# CD338 (ABCG2) Monoclonal Antibody (5D3), PE, eBioscience™

## Product Details

Size	100 Tests
Species Reactivity	Human
Published Species	Dog, Pig, Human, Mouse
Host/Isotype	Mouse / IgG2b, kappa
Recommended Isotype Control	Mouse IgG2b kappa Isotype Control (eBMG2b), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	5D3
Conjugate	PE
Excitation/Emission Max	565/576 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_10854716

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	5 µL (0.25 µg)/test	22 Publications

## Product Specific Information

**Description:** The 5D3 monoclonal antibody reacts with the extracellular portion of the human ABCG2 protein, also known as Bcrp1 and MXR. The ABCG2 gene, a member of the multi-drug resistance (MDR) family, is highly expressed on primitive 'side-population' (SP) stem cells, which are defined by the efflux of fluorescent dyes such as Rhodamine 123 and Hoechst 33342. In the bone marrow, about 0.05% of cells display the low fluorescence and are highly enriched for repopulating cells. The SP cells, which express low or undetectable levels of CD34, have been identified in multiple species. In addition, expression of ABCG2 appears to be highly conserved.

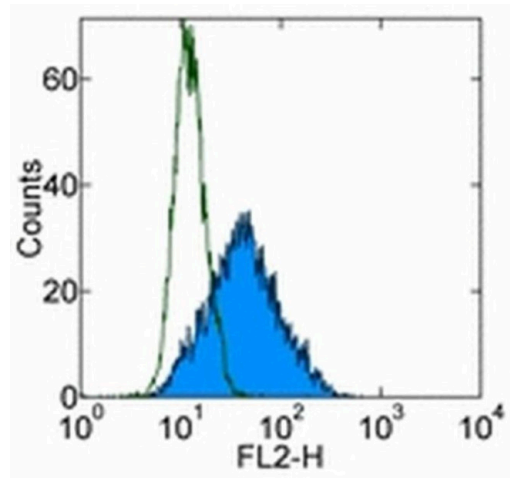
**Applications Reported:** The 5D3 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** Has been pre-titrated and tested by flow cytometric analysis of ABCG2 transfected cells and peripheral blood cells. This can be used at 5 µL (0.25 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Excitation: 488-561 nm; Emission: 578 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

**Product Images For CD338 (ABCG2) Monoclonal Antibody (5D3), PE, eBioscience™**



**CD338 (ABCG2) Antibody (12-8888-42) in Flow**  
Staining of human CD338-transfected cells with Mouse IgG2b K Isotype Control PE (Product # 12-4732-81) (open histogram) or Anti-Human CD338 (ABCG2) PE (filled histogram). Total viable cells were used for analysis.

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Immunohistochemistry (1)

<p>PloS one</p> <p><b>Human prostate side population cells demonstrate stem cell properties in recombination with urogenital sinus mesenchyme.</b></p> <p>"12-8888 was used in Immunohistochemistry to show that the ABCG2 expressing side population from freshly digested prostate tissue is enriched for prostate stem cells."</p> <p>Authors: Foster BA,Gangavarapu KJ,Mathew G,Azabdaftari G,Morrison CD,Miller A,Huss WJ</p>	<p>Year 2013</p> <p>Species Human</p>
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Immunocytochemistry (1)

<p>Molecular pharmacology</p> <p><b>Structural determinants of imidazoacridinones facilitating antitumor activity are crucial for substrate recognition by ABCG2.</b></p> <p>"12-8888 was used in Immunofluorescence to demonstrate that the imidazoacridinone (IA) determinants mediating cytotoxicity also facilitate ABCG2-dependent drug efflux and IA resistance."</p> <p>Authors: Bram EE,Adar Y,Mesika N,Sabisz M,Skladanowski A,Assaraf YG</p>	<p>Year 2009</p> <p>Species Human</p> <p>Dilution 1:100</p>
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Flow Cytometry (22)

<p>Frontiers in bioengineering and biotechnology</p> <p><b>Engineering <i>Escherichia coli</i> for diagnosis and management of hyperuricemia.</b></p> <p>"12-8888-42 was used in Flow cytometry/Cell sorting to show that reprogramming E. coli holds promise as a valid alternative synthetic biology therapy to monitor and maintain healthy serum uric acid levels."</p> <p>Authors: Gencer G,Mancuso C,Chua KJ,Ling H,Costello CM,Chang MW,March JC</p>	<p>Year 2023</p> <p>Species Human</p>
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<p>F1000Research</p> <p><b>A double blinded, placebo-controlled pilot study to examine reduction of CD34 +/CD117 +/CD133 + lymphoma progenitor cells and duration of remission induced by neoadjuvant valspodar in dogs with large B-cell lymphoma.</b></p> <p>"12-8888 was used in Flow cytometry/Cell sorting to examine whether ABCB1 would reduce lymphoma progenitor cells, and extend the length of remission in dogs with therapy naive large B-cell lymphoma."</p> <p>Authors: Ito D,Childress M,Mason N,Winter A,O'Brien T,Henson M,Borgatti A,Lewellen M,Krick E,Stewart J,Lahrman S,Rajwa B,Scott MC,Seelig D,Koopmeiners J,Ruetz S,Modiano J</p>	<p>Year 2021</p> <p>Species Dog</p>
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