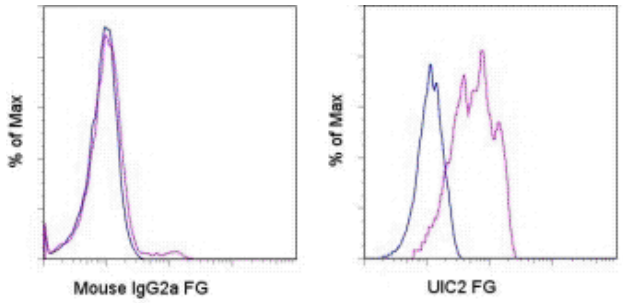
full spectrum cell analysis®
eBioscience®

Anti-Human CD243 (ABCB1) Functional Grade Purified

Catalog Number: 16-2439
Also Known As:P-glycoprotein-1, MDR1
RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of 8226/S (blue histogram) and 8226 DOX40 (purple histogram) cell lines with 0.5 ug of Mouse IgG2a K Isotype Control Functional Grade Purified (cat. 16-4724) (left) or 0.5 ug of Anti-Human CD243 Functional Grade Purified (right) followed by F (ab')2 Anti-Mouse IgG PE (cat. 12-4012). Total viable cells were used for analysis.

Product Information

Contents: Anti-Human CD243 (ABCB1) Functional Grade Purified
REF **Catalog Number:** 16-2439
Clone: UIC2
Concentration: 1 mg/mL
Host/Isotype: Mouse IgG2a
Handling Conditions: Use in sterile environment.
Endotoxin Level: Less than 0.001 ng/ug antibody, as determined by the LAL assay.

Formulation: aqueous buffer, no sodium azide
Temperature Limitation: Store at 2-8°C.
LOT **Batch Code:** Refer to Vial
Use By: Refer to Vial

Description

This monoclonal antibody reacts with human Multidrug Resistant (MDR)-1, which is also known as P-glycoprotein (Pgp) and CD243. A 170-kDa transmembrane protein, MDR-1 is an ATP-dependent efflux pump for lipophilic compounds, including anti-cancer drugs. Expression of MDR-1 has been shown to correlate with multidrug resistance. In fact, tumor resistance to chemotherapy has been linked to MDR-1 expression in many cancers. MDR-1 is expressed in a variety of tissues, including the brain, kidney, liver, pancreas, and testes. Within the immune system, this molecule can be found on normal T, B, and natural killer cells, but not on monocytes.

This antibody has been reported to inhibit MDR1-mediated efflux.

Applications Reported

This UIC2 antibody has been reported for use in functional assays.

Applications Tested

This UIC2 antibody has been pre-titrated and tested by flow cytometric analysis on the multidrug resistant cell line 8226 DOX40 and its parent line 8226/S. This can be used at 1 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 10^5 to 10^8 cells/test.

References

Chaudhary PM, Mechetner EB, Roninson IB. Expression and activity of the multidrug resistance P-glycoprotein in human peripheral blood lymphocytes. Blood. 1992 Dec 1;80(11):2735-9. (UIC2, FC)

Mechetner EB, Roninson IB. Efficient inhibition of P-glycoprotein-mediated multidrug resistance with a monoclonal antibody. Proc Natl Acad Sci U S A. 1992 Jul 1;89(13):5824-8. (UIC2, FA)

Related Products

12-4012 F(ab')2 Anti-Mouse IgG PE (polyclonal)
16-4724 Mouse IgG2a K Isotype Control Functional Grade Purified