

### 30-2614: Anti-Human CD243 APC (Clone : UIC2)

|                                |   |
|--------------------------------|---|
| <b>Clonality :</b>             | Monoclonal  |
| <b>Clone Name :</b>            | UIC2  |
| <b>Application :</b>           | FACS  |
| <b>Reactivity :</b>            | Human   |
| <b>Conjugate :</b>             | APC   |
| <b>Gene :</b>                  | ABCB1   |
| <b>Gene ID :</b>               | 5243  |
| <b>Alternative Name :</b>      | P-Glycoprotein, CLCS, MDR1, PGY1, ABC20, GP170, ABCB1, ABC transporter, ATP binding cassette subfamily B member 1 |
| <b>Isotype :</b>               | Mouse IgG2a kappa   |
| <b>Immunogen Information :</b> | NIH 3T3 cells transfected with human CD243 (MDR-1) cDNA   |

#### Description

CD243, also known as multidrug resistant protein 1 (MDR-1) or P-glycoprotein (Pgp) is an ATP binding cassette (ABC)-containing efflux transporter for xenobiotic lipophilic compounds with broad substrate Specificity. It is responsible for decreased drug accumulation in multidrug-resistant cells and often mediates the development of resistance to anticancer drugs. This protein also functions as a transporter in the blood-brain barrier. It is expressed in many tissues, including the brain, liver, pancreas, testes, kidney, and blood (B, T, NK cells, but not monocytes).

Specificity : The mouse monoclonal antibody UIC2 recognizes an extracellular epitope on CD243 (MDR-1), an approximately 170 kDa ABC transporter expressed on hematopoietic stem cells, B, T, and NK cells, or on many multidrug resistant cancer cells. This antibody preferentially recognizes CD243 in the process of transporting substrate.

#### Product Info

|                            |  |
|----------------------------|--|
| <b>Amount :</b>            | 100 tests  |
| <b>Purification :</b>      | The purified antibody is conjugated with allophycocyanin (APC) under optimum conditions. The conjugate is purified by size-exclusion chromatography. |
| <b>Content :</b>           | Formulation : Stabilizing phosphate buffered saline (PBS) solution containing 15 mM sodium azide   |
| <b>Storage condition :</b> | Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light.  |

#### Application Note

Flow cytometry: The reagent is designed for analysis of human blood cells using 10  $\mu\text{l}$  reagent / 100  $\mu\text{l}$  of whole blood or  $10^6$  cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.

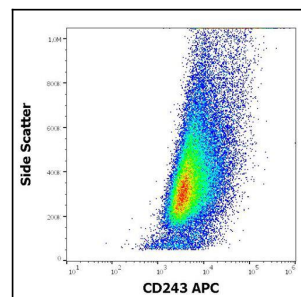


Figure 1 : Flow cytometry surface staining pattern of HEP-G2 cell suspension stained using anti-human CD243 (UIC2) APC antibody (10  $\mu\text{l}$  reagent per million cells in 100  $\mu\text{l}$  of cell suspension).

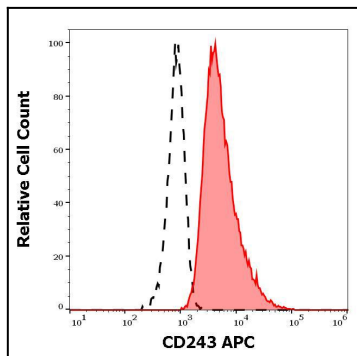


Figure 2 : Separation of HEP-G2 cells (red-filled) from human peripheral whole blood cells (black-dashed) in flow cytometry analysis (surface staining) stained using anti-human anti-human CD243 (UIC2) APC antibody (10  $\mu$ l reagent per milion cells in 100  $\mu$ l of cell suspension).