

Technical Data Sheet

PE Anti-Mouse/human CD45R/B220

Catalog Number: 200911, 200912

Size: 25 tests, 100 tests

Target Name: CD45R, B220

Regulatory Status: RUO

Product Details

Clone: RA3-6B2

Application: FC

Reactivity: Human, Mouse

Format: PE

Isotype: Rat IgG2a

Antibody Type: Monoclonal

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA

Protein Concentration: Supplied at a lot-specific concentration.

Storage and Handling: The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.

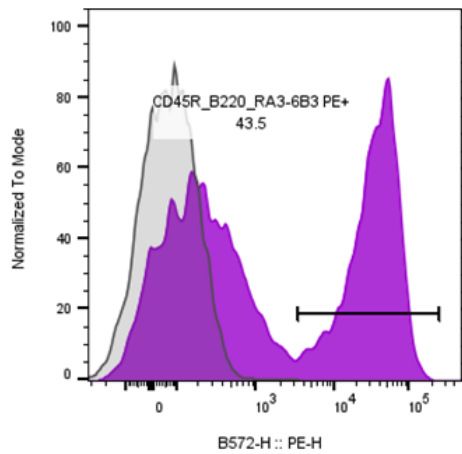
Recommended Usage: For flow cytometric staining, it is recommended to use 5 µL of this reagent per 0.5-1.0 million cells in a 100 µL volume. Optimal reagent performance should be determined by titration for each specific application.

Excitation Laser: Blue Laser (488 nm) Green/Yellow laser (532/561nm)

Background Information

CD45R, also known as B220, is an isoform of CD45 (PTPRC), a member of the protein tyrosine phosphatase (PTP) family. With a molecular weight of approximately 180–240 kDa, CD45R is a transmembrane glycoprotein expressed on B cells at all developmental stages, as well as on activated B cells, subsets of T and NK cells, and certain abnormal T cell populations involved in systemic autoimmunity in MRL-Fas^{lpr} and MRL-Fas^{gld} mice. Structurally, CD45R consists of an extracellular domain, a single transmembrane region, and two tandem intracytoplasmic catalytic domains. Functionally, CD45R plays a critical role in T cell receptor (TCR) and B cell receptor (BCR) signaling by regulating Src-family kinases, which are essential for lymphocyte activation and development. The primary ligands for CD45 include galectin-1, CD2, CD3, and CD4. CD45R is widely used as a pan-B cell marker, though CD19 may provide greater specificity for B cells.

Product Data



Mouse splenocytes stained with PE Anti-mouse/human CD45R/B220 clone RA3-6B2 (Purple histogram) or an isotype control (gray histogram).