

Product datasheet for **SM1115P**

CD45 (PTPRC) (CD45RA) Mouse Monoclonal Antibody [Clone ID: MEM-56]

Product data:

| | |
|-----------------------|---|
| Product Type: | Primary Antibodies |
| Clone Name: | MEM-56 |
| Applications: | FC, IHC, IP, WB |
| Recommended Dilution: | Immunohistochemistry (paraffin sections): No pre-treatment of tissue sections is needed. Flow cytometry: Recommended dilution: 0.3-4 µg/ml. |
| Reactivity: | Human |
| Host: | Mouse |
| Isotype: | IgG2b |
| Clonality: | Monoclonal |
| Immunogen: | Human thymocytes and T lymphocytes |
| Specificity: | The antibody reacts with CD45RA, a 205-220 kDa single chain type I glycoprotein, variant of CD45 (CD45RA isoform). CD45RA is expressed on most of B lymphocytes, resting and native T lymphocytes, medullar thymocytes and monocytes. |
| Formulation: | Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4 State: Purified State: Liquid Ig fraction |
| Concentration: | lot specific |
| Purification: | Protein-A affinity chromatography; purity: > 95% (by SDS-PAGE) |
| Conjugation: | Unconjugated |
| Storage: | Store the antibody at 2 - 8 °C up to one month or (in aliquots) at -20 °C for longer. Avoid repeated freezing and thawing. |
| Stability: | Shelf life: one year from despatch. |
| Gene Name: | protein tyrosine phosphatase, receptor type C |
| Database Link: | Entrez Gene 5788 Human P08575 |

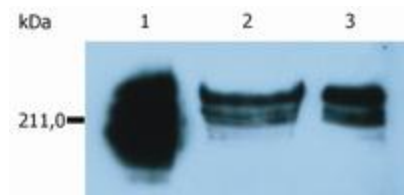
[View online »](#)

Background:

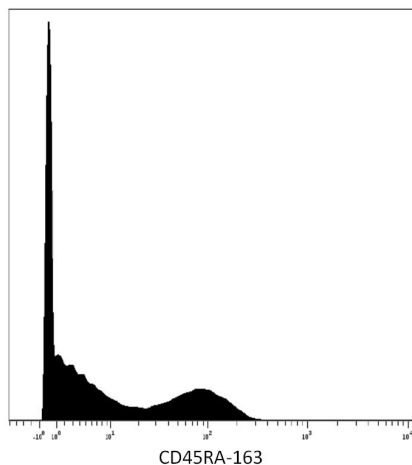
CD45RA is a high molecular weight isoform of a receptor-type protein tyrosine phosphatase, CD45 glycoprotein. CD45 is crucial in lymphocyte development and antigen signaling, serving as an important regulator of Src-family kinases, promotes cell survival by modulating integrin-mediated signal transduction pathway and is also involved in DNA fragmentation during apoptosis. CD45 isoforms differ in their extracellular domains, whereas they share identical transmembrane and cytoplasmic domains. These isoforms differ in their ability to translocate into the glycosphingolipid-enriched membrane domains and their expression depends on cell type and physiological state of the cell. CD45RA is expressed e.g. on nave T cells and normal plasma cells.

Synonyms:

PTPRC, Leukocyte common antigen, L-CA, T200

Product images:


Western Blotting analysis of whole cell lysate of HUT-78 human cutaneous T cell lymphoma cell line. Lane 1: immunostaining with anti-human CD45 control antibody. Lane 2: immunostaining with anti-human CD45RA (MEM-56); sample of cell lysate prepared under non-reducing conditions. Lane 3: immunostaining with anti-human CD45RA (MEM-56); sample of cell lysate prepared under reducing conditions.



Surface staining (mass cytometry) of human peripheral blood with anti-CD45RA (MEM-56) 163Dy. Gated on singlets.