

## 10-7509: Monoclonal Antibody to CD45RO (Clone: C45.1)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	C45.1
<b>Application :</b>	IHC,FACS
<b>Reactivity :</b>	Human
<b>Gene :</b>	PTPRC
<b>Gene ID :</b>	5788
<b>Uniprot ID :</b>	P08575
<b>Format :</b>	Purified
<b>Alternative Name :</b>	PTPRC,CD45
<b>Isotype :</b>	Mouse IgG2a Kappa
<b>Immunogen Information :</b>	Interleukin-2-dependent human T lymphocytes were used as the immunogen for the CD45RO antibody.

### Description

The CD45RA and CD45RO isoforms of the leukocyte common antigen identify functionally distinct naive and memory T cell subsets. In vitro, CD45RA+ / CD45RO - peripheral blood lymphocytes (PBL) can be converted to CD45RA- / CD45RO + phenotype upon activation in the presence of IL-2. Both CD3+ and CD3-/CD56+ lymphocyte subsets can be converted to CD45RO + lymphocytes. Expression of CD45RO was observed only in response to IL-2 and was not observed during long-term culture in IL-4, IL-6, or IL-7. This antibody recognizes an 180kDa protein, identified as isoform of leukocyte common antigen (CD45RO). This antibody reacts with mature activated T-cells, most thymocytes, and a sub-population of resting T-cells within both CD4 and CD8 subsets. Shows no reactivity with normal B or natural killer cells, but reacts with granulocytes and monocytes. Though this antibody is useful to identify T-cell lymphomas and leukemia, rare staining with B cell lymphomas reported.

### Product Info

<b>Amount :</b>	25 µg / 100 µg
<b>Purification :</b>	Protein G Chromatography
<b>Content :</b>	25 µg in 50 µl/100 µg in 200 µl PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic.
<b>Storage condition :</b>	Store the antibody at 4°C; stable for 6 months. For long-term storage; store at -20°C. Avoid repeated freeze and thaw cycles.

### Application Note

Immunohistochemical analysis: 1:250-1:500

FACS analysis: 0.5-2 µg/10<sup>6</sup> cells

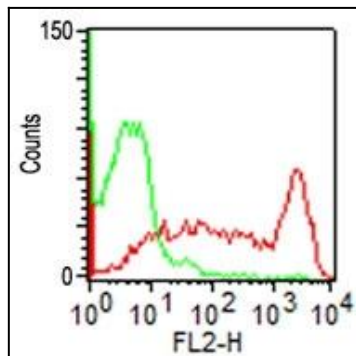


Fig.1: Cell Surface flow analysis of hCD45RO in PBMC (Lymphocytes gated) using 0.5  $\mu\text{g}$  antibody per  $10^6$  cells. Green represents isotype control (ABEOMICS); red represents anti-hCD45RO antibody (10-7509). Goat anti-mouse PE conjugated secondary antibody was used (ABEOMICS).

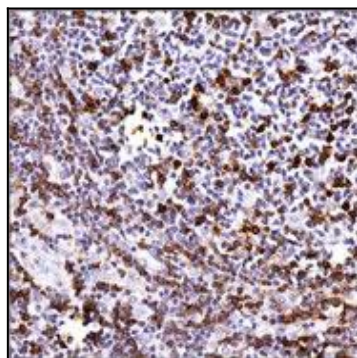


Fig: 2 Immunohistochemical analysis of CD45RO in human tonsil using CD45RO antibody (Clone: C45.1) at 1:500 dilution.