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## Mouse Anti-CD45RO Monoclonal Antibody

CLX545AP  
CLX545F  
CLX545PE

**Clone:** UCHL1

**Isotype:** Mouse IgG2a

**Specificity:**

The antibody UCHL1 recognizes CD45RO, a 180 kDa low molecular weight isoform of the leukocyte common antigen (LCA). The antigen is expressed on a subset of memory/activated T cells and on cortical thymocytes.

**HLDA III; WS Code NL 826**

**HLDA III; WS Code T 128**

**HLDA IV; WS Code NL 31**

**HLDA V; WS Code BP BP460**

**HLDA V; WS Code T T-081**

**HLDA V; WS Code T T-CD45.43**

**Immunogen:** Human IL-2 dependent T cells.

**Species Reactivity:** Human

**Application:** Flow Cytometry; Immunohistochemistry (paraffin and frozen sections), Immunoprecipitation.

**Note:** This product does not require protein digestion pre-treatment of paraffin sections. This product does not require antigen retrieval using heat treatment prior to staining of paraffin sections. Positive tissue is human tonsil.

**Conjugate Preparation:**

The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) and R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.

**Presentation:**

**Purified:** 0.1 mg (1 mg/mL) purified IgG buffered in PBS with 15 mM sodium azide, approx. pH 7.4. (Purified from hybridoma culture supernatant by protein-G affinity chromatography).

**FITC:** 2 mL of FITC conjugated IgG buffered in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide. Sufficient for 100 tests.

**PE:** 2 mL of PE conjugated IgG buffered in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide. Sufficient for 100 tests.

*Continued Overleaf.....*

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### **Storage / Stability:**

Store in the dark at 2-8°C. Do not freeze all formats. Avoid prolonged exposure to light of conjugates. Do not use after expiration date stamped on vial label.

### **Usage:**

Recommended dilutions for Flow Cytometry analysis of human blood cells using:

**Purified:** 10 µl reagent / 100 µl of whole blood or 10<sup>6</sup> cells in a suspension.

**FITC:** 20 µl reagent / 100 µl of whole blood or 10<sup>6</sup> cells in a suspension.

**PE:** 20 µl reagent / 100 µl of whole blood or 10<sup>6</sup> cells in a suspension.

### **Background:**

**CD45RO** is the shortest 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. CD45R0 is expressed e.g. on macrophages, CD8+ T cells, activated T cells and myeloma cells.

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- \*And many other.

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