

### 30-2171: Anti-CD45 / LCA Monoclonal Antibody (Clone:MEM-28)-PE Conjugated

Clonality :	Monoclonal
Clone Name :	MEM-28
Application :	FACS
Reactivity :	Human
Conjugate :	PE
Gene :	PTPRC
Gene ID :	5788
Uniprot ID :	P08575
Alternative Name :	PTPRC,CD45
Isotype :	Mouse IgG1
Immunogen Information :	Human thymocytes and T lymphocytes.

#### Description

CD45 (LCA, leukocyte common antigen) is a receptor-type protein tyrosine phosphatase ubiquitously expressed in all nucleated hematopoietic cells, comprising approximately 10% of all surface proteins in lymphocytes. CD45 glycoprotein is crucial in lymphocyte development and antigen signaling, serving as an important regulator of Src-family kinases. CD45 protein exists as multiple isoforms as a result of alternative splicing; these 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. Besides the role in immunoreceptor signaling, CD45 is important in promoting cell survival by modulating integrin-mediated signal transduction pathway and is also involved in DNA fragmentation during apoptosis.

#### Product Info

Amount :	100 tests
Storage condition :	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light.

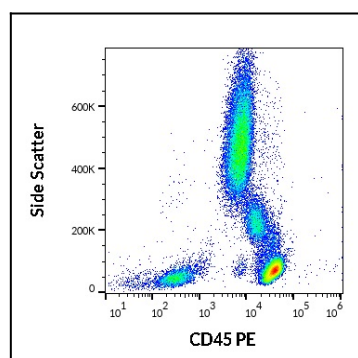


Fig.1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD45 (MEM-28) PE antibody (30-2171) (20 µl reagent / 100 µl of peripheral whole blood).

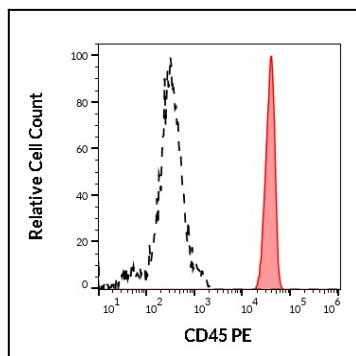


Fig.2: Separation of human lymphocytes (red-filled) from human CD45 negative blood debris (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD45 (MEM-28) PE antibody (30-2171) (20  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).