

# Monoclonal Antibody to CD45 / LCA - Biotin

Alternate names: L-CA, Leukocyte common antigen, PTPRC, Receptor-type tyrosine-protein phosphatase C,

1200

Catalog No.: SM1795B

Quantity: 0.1 mg

Concentration: 0.1 mg/ml

Background: CD45 is a family of single chain transmembraneous glycoproteins consisting of at least four isoforms (220, 205, 190, 180 kDa) which share a common large intracellular domain. Their

extracellular domains are heavily glycosylated. The different isoforms are produced by alternative messenger RNA splicing of three exons of a single gene on chromosome 1. CD45 is expressed on cells of the human hematopoietic lineage (including hematopoietic stem cells) with the exception of mature red cells. It is not detected on differentiated cells of other tissues. It is likely that CD45 plays an important role in signal transduction, inhibition or upregulation of various immunological functions. Antibodies recognising a common epitope on all of the isoforms are termed CD45 whilst those recognising only individual

isoforms are termed CD45RA or CD45RO etc.

Uniprot ID: P08575

NCBI: NP 002829.2

**GenelD:** <u>5788</u>

Host / Isotype: Mouse / IgG2a Clone: F-10-89-4

Immunogen: Human T lymphocytes. Spleen cells from immunised BALB/c mice were fused with cells of

the mouse NS-1 myeloma cell line.

Format: State: Liquid purified IgG

Purification: Affinity chromatography on Protein G

Buffer System: PBS, pH7.4 containing 0.09% Sodium Azide and 1% Bovine Serum Albumin

Label: Biotin

**Applications:** Flow cytometry.

Other applications not tested. Optimal dilutions are dependent on conditions and should

be determined by the user.



## SM1795B: Monoclonal Antibody to CD45 / LCA - Biotin

### **Specificity:**

This antibody recognises the CD45 cell surface antigen, also known as the leucocyte common antigen (LCA). Antibodies recognising a common epitope on all of these isoforms are termed CD45 whilst those recognising only individual isoforms are termed CD45RA or CD45RO etc. Clone F10-89-4 reacts with all forms of CD45 expressed by all haematopoietic cells, except erythrocytes, having a higher level of expression on lymphocytes than on granulocytes.

Species: Human.

Other species not tested.

### Storage:

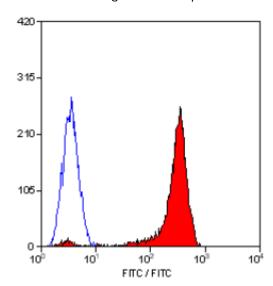
Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General References: 1. Dalchau, R. et al. (1980) Monoclonal antibody to a human leucocyte specific membrane glycoprotein probably homologous to the leucocyte common antigen of the rat. Eur. J. Immunol. 10: 737-744.

> 2. Quenby, S. et al. (1999) Pre-implantation endometrial leukocytes in women with recurrent miscarriage. Human Reprod. 14: 2386-2391.

#### **Pictures:**



Staining of human peripheral blood lymphocytes with MOUSE ANTI HUMAN CD45:BIOTIN (SM1795B).