

SM1796P

Acris Antibodies GmbH

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Monoclonal Antibody to CD45 / LCA (CD45RA) - Purified

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

Catalog No.: SM1796P **Quantity:** 0.2 mg **Concentration:** 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

GeneID: 5788

Host / Isotype: Mouse / IgG1 F8-11-13 Clone:

Immunogen: Human T lymphocytes

Format: State: Liquid

> **Purification:** Protein G affinity purified immunoglobulin fraction **Buffer System:** PBS buffer with 0.09% sodium azide as preservative

Applications: Flow cytometry (Use 10 μ l of 1/50 - 1/100 diluted antibody to label 10e6 cells in 100 μ l).

Immunohistochemistry on frozen and paraffin embedded sections (1/200; Does not require

protein digestion pre-treatment nor antigen retrieval using heat treatment).

Recommended Positive Control Tissue: Human tonsil.

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

be determined by the user.



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Specificity:

Recognises the human CD45RA cell surface antigen.

CD45 is a complex molecule existing in a number of isoforms. 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 F8-11-13 reacts with the high molecular weight form of the leucocyte common antigen (LCA) expressed by B lymphocytes and a subset of T lymphocytes.

This product is routinely tested in flow cytometry on human peripheral blood lymphocytes.

Species: Human, Monkey (Rhesus Monkey).

Other species not tested.

Storage:

Store the antibody at 2-8°C for one month or at -20°C for longer. This product should be stored undiluted. Avoid repeated freezing and thawing. Shelf life: One year from despatch.

General References: 1. Dalchau, R. and Fabre, J.W. (1981) Identification with a monoclonal antibody of the predominantly B lymphocyte specific determinant of the human leucocyte common antigen: evidence for structural and possible functional diversity of the leucocyte common molecule. J. Exp. Med. 153: 753-765.

> 2. O'Grady, J. T. et al. (1994) CD40 expression in Hodgkin's disease. Am. J. Pathol. 144:21-26.

3. Franitza, S. et al. (2002) TGF-beta1 enhances SDF-1alpha-induced chemotaxis and homing of naive T cells by up-regulating CXCR4 expression and downstream cytoskeletal effector molecules. J. Immunol. 32:193-202.