

Monoclonal Antibody to CD45 / LCA - PE

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

T200

Catalog No.: SM2229R
Quantity: 100 Tests
Concentration: 0.1 mg/ml

Background: CD45 is a heavily-glycosylated transmembrane protein tyrosine phosphatase (PTPase)

expressed by all nucleated cells of haematopoietic origin. Variation in the expression of a particular CD45 isoform, is regulated during the haematopoietic development of the different cell lineages. CD45 is essential for antigen-induced signal transduction through the antigen receptor and as with other PTPase family members, acts in balance with protein tyrosine kinases, causing the dephosphorylation of negative regulatory tyrosine sites. Studies have indicated that dephosphorylation by CD45, is required for the activation of the src-family kinases p56lck and p59fyn. Investigations into the properties of CD45 in chicken models are limited, but there is evidence of the existence of an additional cysteine residue near the transmembrane region. The overall domain structure between mammalian and chicken CD45 appears to be conserved, but the sequence homology between the

extracellular regions is very low.

 Uniprot ID:
 Q918D7

 NCBI:
 9031

Host / Isotype: Mouse / IgG2a

Clone: UM16-6

Immunogen: COS cells transfected with CD45 gene.

Format: State: Lyophilized purified IgG

Purification: Affinity chromatography on Protein G

Buffer System: Containing 0.09% Sodium Azide and 1% Bovine Serum Albumin

Label: PE - R. Phycoerythrin (RPE)

Reconstitution: Restore with 1.0 ml distilled water

Applications: Flow Cytometry: Neat - 1/5; Use 10μl of the suggested working dilution to label 10e6 cells in

100ul.

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

be determined by the user.

Specificity: This antibody recognizes CD45 (leucocyte common antigen).

Species: Chicken.

Other species not tested.



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Storage:

Prior to and following reconstitution store the antibody at 2-8°C.

DO NOT FREEZE!

This product is photosensitive and should be protected from light.

Shelf life: one year from despatch.

General References: 1. Symons, A. et al. (1999) Domain organization of the extracellular region of CD45. Protein Engineering 12(10): 885-892.

- 2. Okumura, M. et al. (1996) Comparison of CD45 extracellular domain sequences from divergent vertebrate species suggests the conservation of three fibronectin type III domains. J. Immunol. 157: 1569-1575.
- 3. Jung, E.J. et al. (1997) Phosphorylation of chicken protein tyrosine phosphatase 1 by casein kinase II in vitro. Experimental and Molecular Medicine 29(4): 229-233.