

SM2030P**Monoclonal Antibody to CD45 (CD45R) - Purified**

Alternate names:	CD45R, L-CA, Leukocyte common antigen, PTPRC, T200
Quantity:	0.25 mg
Concentration:	1.0 mg/ml
Background:	CD45 is a family of single chain transmembrane 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.
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	AM03095PU-N
Clone:	20.96
Immunogen:	Ovine thymocytes. 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, pH 7.4 containing 0.09% Sodium Azide
Applications:	Immunoprecipitation. Immunohistochemistry on frozen sections. Flow Cytometry: 1/50 - 1/100; Use 10µl of the suggested working dilution to label 1 x 10 ⁶ cells in 100µl. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognises the CD45R cell surface antigen. In immunohistochemical staining the antibody labels all lymphocytes within the B cell follicles as well as scattered cells in interfollicular areas. This clone has been reported to react with paraffin-embedded material following alcohol fixation. Please refer to ref. Sainte Marie, et al for alcohol fixation protocol. Species: Sheep. 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 Readings:

1. Mackay CR, Maddox JF, Brandon MR. A monoclonal antibody to the p220 component of sheep LCA identifies B cells and a unique lymphocyte subset. *Cell Immunol.* 1987 Nov;110(1):46-55. PubMed PMID: 2445494.

2. Sainte Marie, G. et al. (1962) A paraffin embedding technique for studies employing immunofluorescence. *J.Histochem. Cytochem.* 10: 250