SM608

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# Monoclonal Antibody to CD45 - Supernatant

**Alternate names:** CD45R, CD45RA, CD45RB, CD45RO, L-CA, Leukocyte common antigen, PTPRC, T200

**Catalog No.:** SM608

**Quantity:** 2 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.

**Host / Isotype:** Mouse / IgG1

**Clone:** L12-201

**Immunogen:** Glycoproteins isolated from the T cell line, RL-5. Spleen cells from immunised mice were fused with cells of the P3.X63.Ag8-U1 mouse myeloma cell line.

**Format:** **State:** Liquid tissue culture supernatant
**Buffer System:** 0.2M Tris/HCL, pH 7.4, containing 0.09% Sodium Azide

**Applications:** Flow cytometry (neat - 1/10): use 10 µl of the suggested working dilution to label 10e6 cells or cells or 100µl whole blood.
Immunohistochemistry on frozen sections.
Immunoprecipitation was only obtained after cross linking antibody to the labelled cell surface. This gave a band of 200 kDa.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:** This antibody shows pan leucocyte reactivity by flow cytometry and immunohistochemistry.
**Species:** Rabbit.
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. Jackson S, Chused TM, Wilkinson JM, Leiserson WM, Kindt TJ. Differentiation antigens identify subpopulations of rabbit T and B lymphocytes. Definition by flow cytometry. J Exp Med. 1983 Jan 1;157(1):34-46. PubMed PMID: 6600269.

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3. Wilkinson JM, Galea-Lauri J, Reid HW. A cytotoxic rabbit T-cell line infected with a gamma-herpes virus which expresses CD8 and class II antigens. Immunology. 1992 Sep;77(1):106-8. PubMed PMID: 1328042.
4. Wilkinson JM, McDonald G, Smith S, Galea-Lauri J, Lewthwaite J, Henderson B, et al. Immunohistochemical identification of leucocyte populations in normal tissue and inflamed synovium of the rabbit. J Pathol. 1993 Jul;170(3):315-20. PubMed PMID: 8133406.