

SM416R**Monoclonal Antibody to CD45 (CD45R) - PE****Alternate names:**

CD45R, L-CA, Leukocyte common antigen, PTPRC, T200

Quantity:

100 Tests

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:

Rat / IgG2b

Recommended Isotype

SM19R

Controls:**Clone:**

YKIX753.22.2

Immunogen:

Canine thymocytes. Spleen cells from immunised DA rat were fused with cells of the Y3/Ag1.2.3 rat myeloma cell line.

Format:**State:** Lyophilized purified IgG**Purification:** Affinity chromatography on Protein G**Buffer System:** PBS containing 0.09% Sodium Azide and 1% Bovine Serum Albumin**Label:** PE – R. Phycoerythrin (RPE)**Reconstitution:** Restore with 1ml distilled water**Applications:**

Flow Cytometry.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

This antibody was clustered as a CD45R at the first canine Leucocyte Antigen workshop. It precipitates an antigen of 220kD from Con A Blasts and recognises a CD45R isoform. It is expressed on subsets of leucocytes (neutrophils are weak) in canine blood of all our bred mongrels and beagles tested.

Species: Dog.

Other species not tested.

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 Readings:

1. Cobbold S, Metcalfe S. Monoclonal antibodies that define canine homologues of human CD antigens: summary of the First International Canine Leukocyte Antigen Workshop (CLAW). Tissue Antigens. 1994 Mar;43(3):137-54. PubMed PMID: 8091414.