

SM415R**Monoclonal Antibody to CD45 - PE**

Alternate names:	CD45R, CD45RA, CD45RB, CD45RO, L-CA, Leukocyte common antigen, PTPRC, T200
Quantity:	100 Tests
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:	Rat / IgG2b
Recommended Isotype Controls:	SM19R
Clone:	YKIX716.13
Immunogen:	Canine thymocytes. Spleen cells from immunised DA rats 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: Neat - 1/10; Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	Clustered as Canine CD45 in the First Canine Leukocyte Antigen Workshop. Expressed on all leukocytes in canine peripheral blood. This antibody reacts with CD45 on all outbred 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. 2. Reis AB, Teixeira-Carvalho A, Giunchetti RC, Guerra LL, Carvalho MG, Mayrink W, et

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12. Aresu L, Aricò A, Comazzi S, Gelain ME, Riondato F, Mortarino M, et al. VEGF and MMP-9: biomarkers for canine lymphoma. *Vet Comp Oncol*. 2014 Mar;12(1):29-36. doi: 10.1111/j.1476-5829.2012.00328.x. Epub 2012 Apr 10. PubMed PMID: 22489798.
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Pictures:

SM415R staining of canine peripheral blood lymphocytes

