

SM582F**Monoclonal Antibody to CD45 - FITC**

Alternate names:	CD45R, CD45RA, CD45RB, CD45RO, L-CA, Leukocyte common antigen, PTPRC, T200
Quantity:	0.1 mg
Concentration:	0.1 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
Clone:	IH-1
Immunogen:	Guinea pig leukemic B lymphocyte L2C cells
Format:	State: Liquid purified IgG fraction Purification: Affinity Chromatography on Protein A Buffer System: PBS, pH 8.0 Preservatives: 0.09% Sodium Azide Stabilizers: 1% BSA Label: FITC – Fluorescein Isothiocyanate Isomer 1
Applications:	Flow Cytometry: Use 10 µl of neat-1/10 diluted antibody to label 10 ⁶ cells in 100 µl. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	The antibody reacts with CD45 on all leucocytes. Species: Guinea Pig. Other species not tested.
Add. Information:	Immunoprecipitates proteins of M.Wt. 220,000, 210,000, 195,000 and 180,000 from lymph node lymphocytes and proteins of M.Wt 195,000, 180,000 and 170,000 from thymocytes.
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	1. Hart, I.J. et al. (1992) Subpopulations of guinea pig T lymphocytes defined by isoforms of the leucocyte common antigen. <i>Immunol.</i> 77: 377-384. 2. Wang Y, Nagarajan U, Hennings L, Bowlin AK, Rank RG. Local host response to

chlamydial urethral infection in male guinea pigs. *Infect Immun.* 2010 Apr;78(4):1670-81. doi: 10.1128/IAI.01339-09. Epub 2010 Feb 1. PubMed PMID: 20123720.

3. Shang, S. et al. (2010) The activity of TMC 207, rifampin, and pyrazinamide against *Mycobacterium tuberculosis* infection in guinea pigs. *Antimicrob Agents Chemother.* 2010 Oct 11. [Epub ahead of print]

4. Lacy HM, Bowlin AK, Hennings L, Scurlock AM, Nagarajan UM, Rank RG. Essential role for neutrophils in pathogenesis and adaptive immunity in *Chlamydia caviae* ocular infections. *Infect Immun.* 2011 May;79(5):1889-97. doi: 10.1128/IAI.01257-10. Epub 2011 Mar 14. PubMed PMID: 21402767.