

## Product datasheet for **SM1744P**

### CD45 (PTPRC) Rat Monoclonal Antibody [Clone ID: YTH24.5]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	YTH24.5
Applications:	FC, IHC
Recommended Dilution:	<b>Flow Cytometry:</b> Use 10 µl of 1/10-1/100 diluted antibody to label 10 <sup>6</sup> cells in 100 µl. <b>Immunohistochemistry on Paraffin Sections:</b> 10 µg/ml.
Reactivity:	Human
Host:	Rat
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Human T lymphocytes.
Specificity:	This antibody recognises the leukocyte common antigen CD45, expressed on all cells of haematopoietic origin except for erythrocytes. The isolation and characterization of this cell line was carried out with the help of funds supplied by the Medical Research Council, United Kingdom.
Formulation:	PBS State: Purified State: Liquid purified IgG fraction Preservative: 0.09% Sodium Azide
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein A
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	protein tyrosine phosphatase, receptor type C
Database Link:	<a href="#">Entrez Gene 5788 Human P08575</a>



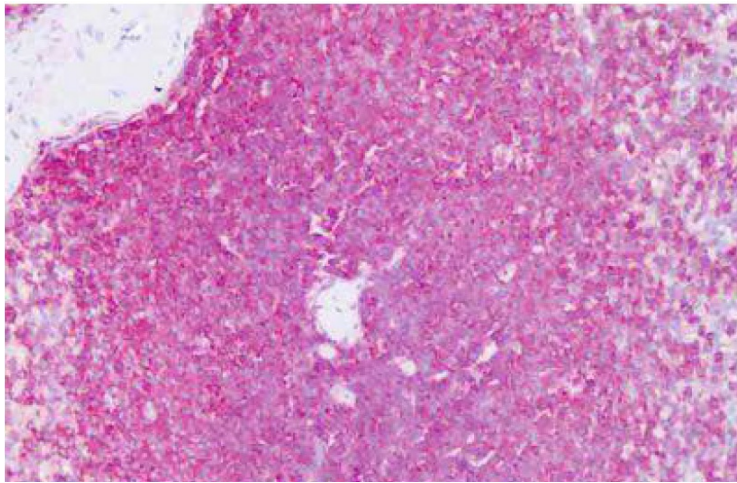
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**Background:**

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.

**Synonyms:**

PTPRC, Leukocyte common antigen, L-CA, T200

**Product images:**

Formalin-Fixed, Paraffin-Embedded HUMAN Spleen stained with CD45 antibody at 10 ug/ml after heat-induced antigen retrieval.