



## CD45.2 Antibody [104] (PE)

CATALOG NUMBER: 76-558

### Specifications

<b>SPECIES REACTIVITY:</b>	Mouse
<b>TESTED APPLICATIONS:</b>	FACS
<b>USER NOTE:</b>	Optimal dilutions for each application to be determined by the researcher.
<b>SPECIFICITY:</b>	The 104 monoclonal antibody specifically reacts with the mouse CD45 molecule, the Leukocyte Common Antigen (LCA) which occurs in the alloantigen CD45.2-expressing mouse strains (C57BL/6, CBA, 129, A, AKR, C58, DBA/1, DBA/2, BALB/c, and C3H/He).
<b>HOST SPECIES:</b>	Mouse

### Properties

<b>PURIFICATION:</b>	The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.
<b>PHYSICAL STATE:</b>	liquid
<b>BUFFER:</b>	Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, pH7.2.
<b>CONCENTRATION:</b>	0.2 mg/mL
<b>STORAGE CONDITIONS:</b>	The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze.
<b>CLONALITY:</b>	Monoclonal
<b>ISOTYPE:</b>	Mouse IgG2a, kappa
<b>CONJUGATE:</b>	PE

### Additional Info

<b>ALTERNATE NAMES:</b>	loc, B220, Cd45, L-CA, Ly-5, T200, CD45R, Lyt-4, Ptprc
<b>OFFICIAL SYMBOL:</b>	Ptprc
<b>GENE ID:</b>	19264

### Background

<b>BACKGROUND:</b>	The 104 monoclonal antibody specifically reacts with the mouse CD45 molecule, the Leukocyte Common Antigen (LCA) which occurs in the alloantigen CD45.2-expressing mouse strains (C57BL/6, CBA, 129, A, AKR, C58, DBA/1, DBA/2, BALB/c, and C3H/He). The 104 monoclonal antibody does not react with the leukocytes of the CD45.1-expressing mouse strains (DA, SJL/J, RIII, and STS/A). The CD45 molecule is a member of the Protein Tyrosine Phosphatase (PTP) family, because its intracellular region contains two PTP domains. The extracellular region's variability is caused by different levels of glycosylation, and the splicing of the 4, 5, and 6 exons. The isoforms found in the mouse strains depend on the activation state, maturation stage and cell type, and are very important in B and T lymphocytes antigen receptor signal transduction. The 104 antibody inhibits some of the B lymphocytes responses, reduces the serum IgG levels, and influences the autoimmune renal pathology.
--------------------	---

<b>REFERENCES:</b>	1) Shen, F. W., Tung, J. S., Boyse, E. A. (1986). Further definition of the Ly-5 system. Immunogenetics, 24(3), 146-149.
--------------------	--

2) Shen, F.W. (1981) Monoclonal antibodies to mouse lymphocyte differentiation alloantigens. Monoclonal Antibodies and T-Cell Hybridomas: Perspectives and Technical Advances. G.J. H U. H and J.F. Kearney, editors. Elsevier/North-Holland, Amsterdam. pp. 2531.

3) Yakura, H., Shen, F. W., Bourcet, E., Boyse, E. A. (1983). On the function of Ly-5 in the regulation of antigen-driven B cell differentiation. Comparison and contrast with Lyb-2. The Journal of experimental medicine, 157(4), 1077-1088.

4) Suzuki, K., Oida, T., Hamada, H., Hitotsumatsu, O., Watanabe, M., Hibi, T., ... Ishikawa, H. (2000). Gut cryptopatches: direct evidence of extrathymic anatomical sites for intestinal T lymphopoiesis. Immunity, 13(5), 691-702.

**FOR RESEARCH USE ONLY**

December 13, 2016