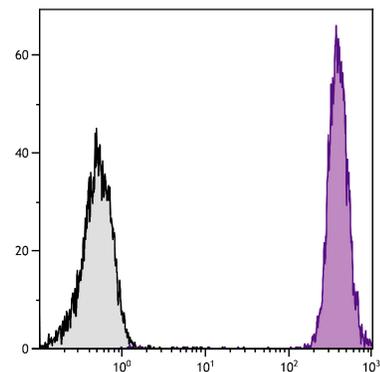




## Rat Anti-Mouse CD45

Cat. No.	Format	Size
1660-01	Purified (UNLB)	0.5 mg
1660-02	Fluorescein (FITC)	0.5 mg
1660-02S	Fluorescein (FITC)	0.1 mg
1660-08	Biotin (BIOT)	0.5 mg
1660-09	R-phycoerythrin (PE)	0.1 mg
1660-10	R-phycoerythrin-Texas Red® (PE/TXRD)	0.1 mg
1660-11	Allophycocyanin (APC)	0.1 mg
1660-13	Spectral Red® (SPRD)	0.1 mg
1660-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg
1660-16	R-phycoerythrin-Cyanine 5.5 (PE/CY5.5)	0.1 mg
1660-17	R-phycoerythrin-Cyanine 7 (PE/CY7)	0.1 mg
1660-19	Allophycocyanin-Cyanine 7 (APC/CY7)	0.1 mg
1660-26	Pacific Blue™ (PACBLU)	0.1 mg
1660-27	Alexa Fluor® 700 (AF700)	0.1 mg
1660-30	Alexa Fluor® 488 (AF488)	0.1 mg
1660-31	Alexa Fluor® 647 (AF647)	0.1 mg



BALB/c mouse splenocytes were stained with Rat Anti-Mouse CD45-PE/TXRD (SB Cat. No. 1660-10).

### Overview

<b>Clone</b>	I3/2.3
<b>Isotype</b>	Rat (Lewis) IgG <sub>2b</sub> λ
<b>Immunogen</b>	T1M1 (Thy-1 <sup>-c</sup> ) cells
<b>Specificity</b>	Mouse CD45 (all isoforms); Mr 180-240 kDa
<b>Alternate Name(s)</b>	LCA, leukocyte common antigen, T200, Ly-5, Receptor-type tyrosine-protein phosphatase C, Lyl-4, Ptpcr

### Description

CD45 is the common leukocyte antigen and is expressed on all cells of hematopoietic origin except erythrocytes. CD45 exists as a number of different isoforms which result from alternative RNA splicing of exons 4, 5 and 6. The I3/2.3 monoclonal antibody recognizes a framework epitope present on all CD45 isoforms. The CD45 molecule has been implicated as playing a key role in thymic development and in antigen-driven proliferation of T cells.

### Applications

FC – Quality tested <sup>2,5-7</sup>  
 IHC-FS – Reported in literature <sup>3,4</sup>  
 IP – Reported in literature <sup>1,2</sup>

### Working Dilutions

<b>Flow Cytometry</b>	FITC, BIOT, AF488, and PACBLU conjugates	≤ 1 μg/10 <sup>6</sup> cells
	PE, PE/TXRD, APC, SPRD, APC/CY7, PE/CY5.5, PE/CY7, AF647, and AF700 conjugates	≤ 0.2 μg/10 <sup>6</sup> cells

For flow cytometry, the suggested use of these reagents is in a final volume of 100 μL

**Other Applications** Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.

**For Research Use Only. Not for Diagnostic or Therapeutic Use.**

## Handling and Storage

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- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg or 0.1 mg in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- The R-phycoerythrin (PE) and allophycocyanin (APC) conjugates are supplied as 0.1 mg in 1.0 mL of PBS/NaN<sub>3</sub> and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Spectral Red® (SPRD), R-phycoerythrin-Texas Red® (PE/txRD), R-phycoerythrin-Cyanine 7 (PE/CY7), R-phycoerythrin-Cyanine 5.5 (PE/CY5.5), and allophycocyanin-Cyanine 7 (APC/CY7) conjugates are supplied as 0.1 mg in 1.0 mL of PBS/NaN<sub>3</sub> and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of PBS. Contains no preservative; handle under aseptic conditions. Store at 2-8°C or aliquot into smaller volumes and store at -20°C. Avoid multiple freeze / thaw cycles.
- The Alexa Fluor® 488 (AF488), Alexa Fluor® 647 (AF647), Alexa Fluor® 700 (AF700), and Pacific Blue™ (PACBLU) conjugates are supplied as 0.1 mg in 0.2 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

## Warning

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Some reagents contain sodium azide. Please refer to product specific SDS.

## References

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1. Trowbridge IS. Interspecies spleen-myeloma hybrid producing monoclonal antibodies against mouse lymphocyte surface glycoprotein, T200. *J Exp Med.* 1978;148:313-23. (Immunogen, IP)
2. Haidl ID, Ng DH, Rothenberger S, Johnson P, Jefferies WA. Detection of restricted isoform expression and tyrosine phosphatase activity of CD45 in murine dendritic cells. *Eur J Immunol.* 1995;25:3370-4. (FC, IP)
3. Craner MJ, Damarjian TG, Liu S, Hains BC, Lo AC, Black JA, et al. Sodium channels contribute to microglia/macrophage activation and function in EAE and MS. *Glia.* 2005;49:220-9. (IHC-FS)
4. Villalta SA, Lang J, Kubeck S, Kabre B, Szot GL, Calderon B, et al. Inhibition of VEGFR-2 reverses type 1 diabetes in NOD mice by abrogating insulinitis and restoring islet function. *Diabetes.* 2013;62:2870-8. (IHC-FS)
5. Takedachi M, Qu D, Ebisuno Y, Oohara H, Joachims ML, McGee ST, et al. CD73-generated adenosine restricts lymphocyte migration into draining lymph nodes. *J Immunol.* 2008;180:6288-96. (FC)
6. Matsunaga H, Hokari R, Kurihara C, Okada Y, Takebayashi K, Okudaira K, et al. Omega-3 fatty acids exacerbate DSS-induced colitis through decreased adiponectin in colonic subepithelial myofibroblasts. *Inflamm Bowel Dis.* 2008;14:1348-57. (FC)
7. Domingos-Pereira S, Decrausaz L, Derré L, Bobst M, Romero P, Schiller JT, et al. Intravaginal TLR agonists increase local vaccine-specific CD8 T cells and human papillomavirus-associated genital-tumor regression in mice. *Mucosal Immunol.* 2013;6:393-404. (FC)

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