

Technical Data Sheet

Purified NA/LE Rat Anti-Mouse CD45

Product Information

Material Number:	562166
Alternate Name:	Ptprc; CD45R; LCA; Leukocyte common antigen; T200; B220; Ly-5; Lyt-4
Size:	0.5 mg
Concentration:	1.0 mg/ml
Clone:	30-F11
Immunogen:	Mouse Thymus / Spleen
Isotype:	Rat (LOU) IgG2b, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	No azide/low endotoxin: Aqueous buffered solution containing no preservative, 0.2µm sterile filtered. Endotoxin level is ≤0.01 EU/µg (≤0.001 ng/µg) of protein as determined by the LAL assay.

Description

The 30-F11 clone has been reported to react with all isoforms and both alloantigens of CD45, which is found on hematopoietic stem cells and all cells of hematopoietic origin, except erythrocytes. CD45 is a transmembrane glycoprotein which is expressed at high levels on the cell-surface, and its presence distinguishes leukocytes from non-hematopoietic cells. CD45 is a member of the Protein Tyrosine Phosphatase (PTP) family, where the intracellular carboxy-terminal region contains two PTP catalytic domains, and the extracellular region is highly variable due to alternative splicing of exons 4, 5, and 6 (designated as A, B, and C, respectively). CD45 isoforms play complex roles in T-cell and B-cell antigen receptor signal transduction and the CD45 isoforms detected in the mouse are cell type-, maturation-, and activation state-specific.

Preparation and Storage

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

This preparation contains no preservatives, thus it should be handled under aseptic conditions.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
553985	Purified NA/LE Rat IgG2b, κ Isotype Control	0.5 mg	A95-1
554656	Stain Buffer (FBS)	500 ml	(none)

Product Notices

- Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- Since applications vary, each investigator should titrate the reagent to obtain optimal results.

References

Johnson P, Maiti A. CD45: A family of leukocyte-specific cell surface glycoproteins. In: Herzenberg LA, Weir DM, Blackwell C, ed. *Weir's Handbook of Experimental Immunology, Vol 2*. Cambridge: Blackwell Science; 1997:62.1-62.16. (Biology)

Lagasse E, Connors H, Al-Dhalimy M, et al. Purified hematopoietic stem cells can differentiate into hepatocytes in vivo. *Nat Med*. 2000; 6(11):1212-1213. (Biology)

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Simon DI, Dhen Z, Seifert P, Edelman ER, Ballantyne CM, Rogers C. Decreased neointimal formation in Mac-1(-/-) mice reveals a role for inflammation in vascular repair after angioplasty. *J Clin Pathol*. 2000; 105(3):293-300. (Clone-specific: Immunohistochemistry)

Tamaki K, Yasaka N, Chang CH, et al. Identification and characterization of novel dermal Thy-1 antigen-bearing dendritic cells in murine skin. *J Invest Dermatol*. 1996; 106(3):571-575. (Clone-specific: Immunofluorescence)

Tan J, Town T, Paris D, et al. Microglial activation resulting from CD40-CD40L interaction after beta-amyloid stimulation. *Science*. 1999; 286(5448):2352-2355. (Clone-specific: Immunohistochemistry)

Thomas ML. The leukocyte common antigen family. *Annu Rev Immunol*. 1989; 7:339-369. (Biology)

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