

Technical Data Sheet

Purified Mouse Anti-Rat CD45

Product Information

Material Number:	554875
Alternate Name:	Leukocyte Common Antigen
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	OX-1
Immunogen:	Leukocyte Common Antigen-enriched Glycoprotein Fraction from Wistar Rat Thymocytes
Isotype:	Mouse (BALB/c) IgG1, κ
Reactivity:	QC Testing: Rat
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The OX-1 antibody reacts with all molecular forms of CD45 (Leukocyte Common Antigen) on all hematopoietic cells except erythrocytes. CD45 is a member of the Protein Tyrosine Phosphatase (PTP) family: Its intracellular (COOH-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 A, B, and C, respectively), plus differing levels of glycosylation. The CD45 isoforms detected in the rat are cell type-, maturation-, and activation state-specific. The CD45 isoforms play complex roles in T-cell and B-cell antigen receptor signal transduction.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.

Preparation and Storage

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

Store undiluted at 4° C.

Application Notes

Application

Flow cytometry	Routinely Tested
Immunoprecipitation	Reported
Immunofluorescence	Reported
Immunohistochemistry-frozen	Reported
Immunohistochemistry-zinc-fixed	Reported
Immunohistochemistry-paraffin	Reported
Immunoaffinity Chromatography	Reported

Recommended Assay Procedure:

For IHC, we recommend the use of purified OX-1 mAb in our special formulation for immunohistochemistry, Cat. No. 550566.

Suggested Companion Products

Catalog Number	Name	Size	Clone
555988	FITC Goat Anti-Mouse IgG/IgM	0.5 mg	Polyclonal
557273	Purified Mouse IgG1, κ Isotype Control	0.5 mg	MOPC-31C

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

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4. Sodium azide is a reversible inhibitor of oxidative metabolism; therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer. Since endotoxin may also affect the results of functional studies, we recommend the NA/LE™ (No Azide/Low Endotoxin) antibody format, if available, for in vitro and in vivo use.

References

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- Woollett GR, Barclay AN, et al. Molecular and antigenic heterogeneity of the rat leukocyte common antigen from thymocytes and T and B lymphocytes.. *Eur J Immunol.* 1985; 15:168-173.(Biology)