Technical Data Sheet

Purified Rat Anti-Mouse CD90.2

Product Information

Material Number:	**553000**
Alternate Name:	Thy-1.2
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	53-2.1
Immunogen:	Mouse Thymus / Spleen
Isotype:	Rat (LOU) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 53-2.1 antibody reacts with the CD90.2 (Thy-1.2) alloantigen on thymocytes, most peripheral T lymphocytes, some intraepithelial T lymphocytes (IEL, DEC), epithelial cells, fibroblasts, neurons, hematopoietic stem cells, but not B lymphocytes, of most mouse strains. mAb 53-2.1 has been reported not to cross-react with Thy-1.1 (e.g., AKR/J, PL), or with rat Thy-1. CD90 is a GPI-anchored membrane glycoprotein of the Ig superfamily which is involved in signal transduction. In addition, there is evidence that CD90 mediates adhesion of thymocytes to thymic stroma. mAb 53-2.1 has been reported to block the binding of anti-mouse CD90.2 clone 30-H12 (Cat. No. 553009) to immobilized thymocyte membranes.

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
Immunohistochemistry-frozen	Tested During Development
Cytotoxicity	Reported
Electron microscopy	Reported
Immunoprecipitation	Reported

Recommended Assay Procedure:

Flow Cytometry: Mouse BD Fc Block™ purified anti-mouse CD16/CD32 clone 2.4G2 (Cat. No. 553141) may help to reduce non-specific binding to cells bearing Fcγ-receptors. For staining in the presence of Mouse BD Fc Block™, a second step antibody which does not recognize the 2.4G2 mAb (Rat IgG2b, κ) must be used, such as FITC anti-rat IgG2a, mAb RG7/1.30 (Cat. No. 553896).

Caution: 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 effect the results of functional studies, we recommend the NA/LE™ (No Azide/Low Endotoxin) antibody format for in vitro and in vivo use.

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Suggested Companion Products

Catalog Number	Name	Size	Clone
553896	FITC Mouse Anti-Rat IgG2a	0.5 mg	RG7/1.30
553141	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.1 mg	2.4G2
553927	Purified Rat IgG2a κ Isotype Control	0.5 mg	R35-95

Product Notices

1. 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.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Since applications vary, each investigator should titrate the reagent to obtain optimal results.

References

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