Technical Data Sheet

Purified Rat Anti-Mouse CD90.2

Product Information

Material Number:	**553009**
Alternate Name:	Thy-1.2
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	30-H12
Immunogen:	Mouse Thymus / Spleen
Isotype:	Rat (LOU) IgG2b, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 30-H12 clone has been reported to react 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. Thy-1.2 has also been initially reported to be detectable on thymic dendritic cells, but later revealed that the antigen was probably picked up from T-lineage cells. 30-H12 mAb 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. It has been reported that crosslinked 30-H12 antibody induces Ca2+ influx into thymocytes and that co-crosslinking of 30-H12 mAb with antibody to the CD3/TCR complex intensifies thymocyte signal transduction, promotes apoptosis of thymocytes, and inhibits the CD3-mediated proliferative response of mature T lymphocytes.

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
Apoptosis	Reported
(Co)-stimulation	Reported

Recommended Assay Procedure:

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

Suggested Companion Products

Catalog Number	Name	Size	Clone
553057	Purified NA/LE Hamster Anti-Mouse CD3e	0.5 mg	145-2C11
553986	Purified Rat IgG2b, Kappa Isotype Standard	0.5 mg	A95-1

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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.

References

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