

Technical Data Sheet

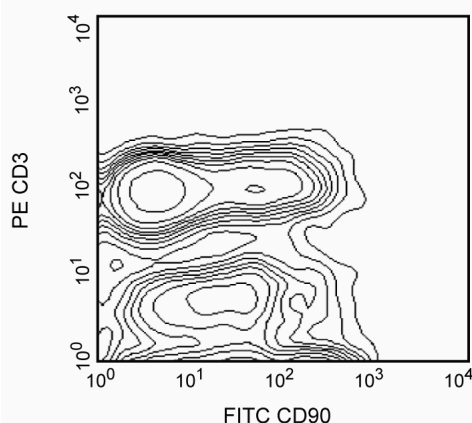
FITC Mouse Anti-Rat CD90/Mouse CD90.1**Product Information**

Material Number:	561973
Alternate Name:	Rat Thy-1; Mouse Thy-1.1
Size:	50 µg
Concentration:	0.5 mg/ml
Clone:	OX-7
Immunogen:	Rat Thymocyte Thy-1 Antigen
Isotype:	Mouse (BALB/c) IgG1, κ
Reactivity:	QC Testing: Rat Tested During Development: Mouse Reported: Guinea Pig, Rabbit
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

CD90 (Thy-1) is a GPI-anchored membrane glycoprotein of the Ig superfamily which is involved in signal transduction. The OX-7 monoclonal antibody specifically binds to rat CD90 reported to be expressed by hematopoietic stem cells, early myeloid & erythroid cells, immature B lymphocytes in the bone marrow & peripheral lymphoid organs, thymocytes, recent thymic emigrants (a subset of CD45RC-peripheral T lymphocytes), neurons, glomerular mesangial cells, endothelium at inflammatory sites, mast cells, and dendritic cells. Rat dendritic epidermal T cells (DEC) have been reported to be CD90 (Thy-1) negative, unlike those of the mouse.

The OX-7 clone has been reported to crossreact with the mouse CD90.1 (Thy-1.1) alloantigen of the AKR/J and PL strains, but not CD90.2 (Thy-1.2) found on many mouse strains. In the mouse, CD90 is found on thymocytes, most peripheral T lymphocytes, some intraepithelial T lymphocytes (IEL, DEC), hematopoietic stem cells, and neurons, but not B lymphocytes. In addition, there is evidence that CD90 mediates adhesion of mouse thymocytes to mouse thymic stroma. The OX-7 clone has also been reported to crossreact with rabbit and guinea pig thymus, brain, and intestine.



Two-color analysis of the expression of CD90 on rat splenic leukocytes. Lewis splenocytes were simultaneously stained with FITC Mouse anti-Rat CD90/Mouse CD90.1(clone OX-7) and PE Mouse anti-Rat CD3 (Cat. No. 554833) monoclonal antibodies. Flow cytometry was performed on a BD FACScan™ instrument.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

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

The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.

Application Notes**Application**

Flow cytometry

Routinely Tested

BD Biosciences

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Suggested Companion Products

Catalog Number	Name	Size	Clone
554833	PE Mouse Anti-Rat CD3	0.2 mg	G4.18
550616	FITC Mouse IgG1, κ Isotype Control	0.25 mg	MOPC-31C
554656	Stain Buffer (FBS)	500 ml	(none)

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. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
4. 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.
5. An isotype control should be used at the same concentration as the antibody of interest.

References

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