Technical Data Sheet

Biotin Rat Anti-Mouse Dendritic Cells

Product Information

Material Number:	**552776**
Alternate Name:	Dendritic Cell inhibitory Receptor-2 (DCIR2)
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	33D1
Immunogen:	Dendritic cells purified from mouse spleen and lymph node
Isotype:	Rat (SD) IgG2b, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 33D1 antibody reacts with an antigen on most dendritic cells (DC) of spleen, lymph node, and Peyer's patch, but not liver, bone marrow, or epidermal dendritic cells; macrophages; other leukocytes; or erythroid cells. Within the spleen, the majority of 33D1+ DC are localized in the marginal zones. Thymic dendritic cells may express a low level of the 33D1 antigen. It has been reported that bone-marrow DC can be induced to express the 33D1 antigen by culture in the presence of GM-CSF, and the resulting 33D1+ DC are effective in in vitro (induction of MLR) and in vivo (anti-tumoral vaccination) assays for antigen presentation. However, the addition of IL-4 to GM-CSF in bone-marrow cultures resulted in loss of 33D1 expression and enhanced the MLR-stimulatory activity of the DC. It has also been reported that 33D1 expression is upregulated when liver-derived DC are cultured on collagen-coated plates in the presence of GM-CSF. In vivo functional 33D1+ DC are induced in the brains of mice chronically infected with Toxoplasma gondii, probably via the parasite's induction of GM-CSF.

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 biotin under optimum conditions, and unreacted biotin was removed.

Application Notes

Application

Flow cytometry	Routinely Tested

Recommended Assay Procedure:

Since the 33D1 antigen may be expressed at low density on the cell surface, we recommend the use of Mouse BD Fc Block™ purified anti-mouse CD16/CD32 mAb 2.4G2 (Cat. No. 553141/553142) and a "bright" second-step reagent, such as Streptavidin-PE (Cat. No. 554061) or Streptavidin-APC (Cat. No. 554067).

Suggested Companion Products

Catalog Number	Name	Size	Clone
553141	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.1 mg	2.4G2
554061	PE Streptavidin	0.5 mg	(none)
554067	APC Streptavidin	0.1 mg	(none)
553987	Biotin Rat IgG2b, κ Isotype Control	0.25 mg	A95-1

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.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.

References

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