Technical Data Sheet

PE Rat Anti-Mouse CD86

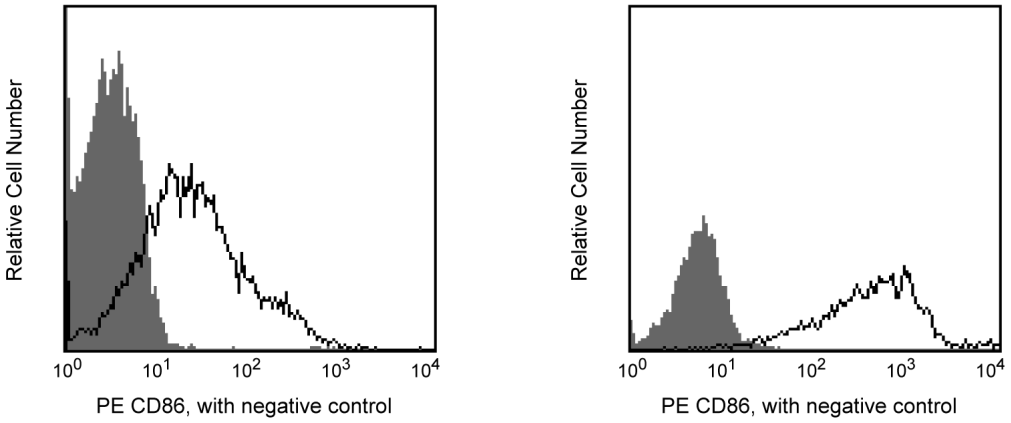
Product Information

Material Number:	**553692**
Alternate Name:	B7-2
Size:	0.2 mg
Concentration:	0.2 mg/ml
Clone:	GL1
Immunogen:	Mouse (CBA/Ca) LPS-activated splenic B Cells
Isotype:	Rat (LOU) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The GL1 antibody has been reported to react with the B7-2 (CD86) costimulatory molecule expressed on a broad spectrum of leukocytes, including B lymphocytes, T lymphocytes, thioglycollate-induced peritoneal macrophages, dendritic cells and astrocytes. CD86 is expressed at low levels by freshly explanted peripheral B and T cells, and its expression is substantially increased by a variety of T cell- and B cell-specific stimuli with a peak expression after 18-42 hours of culture. In contrast to most naive CD4+ T cells, memory CD4+ T cells express B7-2, both at the mRNA and protein level. CD86, a ligand for CD28 and CD152 (CTLA-4), is one of the accessory molecules that plays an important role in T cell-B cell costimulatory interactions. It has been shown to be involved in immunoglobulin class-switching and triggering of mouse NK cell-mediated cytotoxicity. CD80 (B7-1) is an alternate ligand for CD28 and CD152 (CTLA-4). GL1 antibody reportedly blocks MLR and stimulation of T cells by natural antigen-presenting cells. In addition, a mixture of anti-B7-1 and anti B7-2 (GL1) mAbs reportedly inhibits the in vitro interaction of CTLA-4 with its ligand and the in vivo priming of cytotoxic 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.



Upregulation of membrane CD86 (B7-2) on activated B lymphocytes. *Freshly isolated (left panel) or 72-hour LPS-stimulated BALB/c splenocytes (right panel) were pretreated with Mouse BD Fc Block™ purified anti-mouse CD16/CD32 mAb 2.4G2 (Cat. No. 553141/553142) and either stained with PE-conjugated GL1 mAb (open histograms) or unstained (shaded histograms). Flow cytometry was performed on a BD FACScan™ Flow Cytometry System. Resting lymphocytes (left panel) or activated blasts (right panel) were selected according to light-scatter profile.*

Preparation and Storage

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

The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed by gel filtration chromatography.

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

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Application Notes

Application

Flow cytometry	Routinely Tested

Recommended Assay Procedure:

Mouse BD Fc Block™ purified anti-mouse CD16/32 mAb 2.4G2 (Cat. No. 553141/553142) may help to reduce non-specific binding GL1 antibody to cells bearing Fcγ-receptors.

Suggested Companion Products

Catalog Number	Name	Size	Clone
553141	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.1 mg	2.4G2
553930	PE Rat IgG2a, κ Isotype Control	0.1 mg	R35-95

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/pharmingen/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.

References

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