

Technical Data Sheet

Purified NA/LE Rat Anti-Mouse CD86

Product Information

Material Number:	553838
Alternate Name:	B7-2
Size:	0.5 mg
Concentration:	1.0 mg/ml
Clone:	PO3
Immunogen:	BALB/c Mouse B Leukemia Cell Line BCL1
Isotype:	Rat (SD) IgG2b, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	No azide/low endotoxin: Aqueous buffered solution containing no preservative, 0.2 μ m sterile filtered. Endotoxin level is \leq 0.01 EU/ μ g (\leq 0.001 ng/ μ g) of protein as determined by the LAL assay.

Description

The PO3 antibody reacts with the B7-2 (CD86) costimulatory molecule, which is expressed on a broad spectrum of leukocytes, including B lymphocytes, T lymphocytes, macrophages, dendritic cells, and Langerhans cells, plus 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 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 levels. CD86, a ligand for CD28 and 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 CTLA-4. PO3 antibody blocks the in vitro stimulation of T-cell proliferation of T-cell proliferation by soluble anti-CD3e antibody (mAb 145-2C11, Cat. No. 553057) in the presence of CD86-expressing accessory cells. In vivo administration of PO3 mAb can inhibit much of the autoantibody production in (NZB x NZW) F1 mice; and in combination with an anti-CD80 mAb, it can prevent the development and progression of mouse systemic lupus erythematosus-like autoimmune disease.

Preparation and Storage

Store undiluted at 4°C.

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

This preparation contains no preservatives, thus it should be handled under aseptic conditions.

Application Notes

Application

Flow cytometry	Routinely Tested
Blocking	Reported
Immunoprecipitation	Reported
Immunohistochemistry-frozen	Reported

Recommended Assay Procedure:

For immunohistochemical staining of acetone-fixed frozen sections, the use of formulated Purified Rat Anti-Mouse CD86 antibody (Cat. No. 550542) is recommended.

Suggested Companion Products

Catalog Number	Name	Size	Clone
554016	FITC Goat Anti-Rat Ig	0.5 mg	Polyclonal
553985	Purified NA/LE Rat IgG2b, κ Isotype Control	0.5 mg	A95-1
550542	Purified Rat Anti-Mouse CD86	1.0 ml	GL1

Product Notices

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

References

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