Technical Data Sheet

Purified NA/LE Mouse Anti-Rat CD28

Product Information

Material Number:	**554993**
Size:	0.5 mg
Concentration:	1.0 mg/ml
Clone:	JJ319
Immunogen:	Rat CD28-transfected cell line
Isotype:	Mouse (BALB/c) IgG1, κ
Reactivity:	QC Testing: Rat
Storage Buffer:	No azide/low endotoxin: Aqueous buffered solution containing no preservative, 0.2μm sterile filtered. Endotoxin level is ≤0.01 EU/μg (≤0.001 ng/μg) of protein as determined by the LAL assay.

Description

The JJ319 antibody reacts with CD28, which is expressed on virtually all T lymphocytes bearing αβ T-cell receptors (TCR), on most γδ TCR-bearing T cells, and on a subset of NK cells. In the thymus, CD28 expression is developmentally regulated during the maturation of αβ TCR-bearing T cells. CD28 is a costimulatory receptor required for activation of T cells; its ligands include CD80 (B7-1) and CD86 (B7-2). Soluble JJ319 mAb costimulates the proliferative responses and IL-2 production of CD4+ and CD8+ T cells activated by anti-αβ-TCR mAb R73 (Cat. no. 554910). The alternate anti-rat CD28 mAb JJ316 (Cat. No. 554992) is capable of directly stimulating T cells in vitro and in vivo.

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
(Co)-stimulation	Reported
Immunoprecipitation	Reported

Suggested Companion Products

Catalog Number	Name	Size	Clone
553447	Purified NA/LE Mouse IgG1 κ Isotype Control	0.5 mg	107.3
555988	FITC Goat Anti-Mouse IgG/IgM	0.5 mg	Polyclonal

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.

References

Bluestone JA. New perspectives of CD28-B7-mediated T cell costimulation. *Immunity.* 1995; 2(6):555-559. (Biology)

Mitnacht R, Tacke M, Hunig T. Expression of cell interaction molecules by immature rat thymocytes during passage through the CD4+8+ compartment: developmental regulation and induction by T cell receptor engagement of CD2, CD5, CD28, CD11a, CD44 and CD53. *Eur J Immunol.* 1995; 25(2):328-332. (Biology)

Tacke M, Clark GJ, Dallman MJ, Hunig T. Cellular distribution and costimulatory function of rat CD28. Regulated expression during thymocyte maturation and induction of cyclosporin A sensitivity of costimulated T cell responses by phorbol ester. *J Immunol.* 1995; 154(10):5121-5127. (Immunogen: (Co)-stimulation, Immunoprecipitation)

Tacke M, Hanke G, Hanke T, Hunig T. CD28-mediated induction of proliferation in resting T cells in vitro and in vivo without engagement of the T cell receptor: evidence for functionally distinct forms of CD28. *Eur J Immunol.* 1997; 27(1):239-247. (Clone-specific: (Co)-stimulation, Immunoprecipitation)

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