

ARG23538 anti-CD80 antibody [RM80]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Rat Monoclonal antibody [RM80] recognizes CD80. Rat anti Mouse CD80 antibody, clone RM80 recognizes mouse CD80 (B7-1), a ~60 kDa cell surface glycoprotein which is a member of the CD28/B7 family. In mice, CD80 is expressed on monocytes, peritoneal macrophages and dendritic cells, and expression may be significantly increased upon B lymphocytes by LPS and by IL-4. CD80 has been identified as a ligand for CD28 and cytotoxic T-lymphocyte antigen-4 (CTLA-4), two structurally similar molecules expressed on T cells. CD28 and CTLA4 are two receptors that have essential but opposing functions in T-cell stimulation. The interaction of CD80 with CD28 stimulates and sustains T cell responses, whereas the interaction of CD80 with CTLA4 is reported to inhibit T-cell responses.
Tested Reactivity	Ms
Tested Application	FACS, IHC-Fr
Host	Rat
Clonality	Monoclonal
Clone	RM80
Isotype	IgG2a
Target Name	CD80
Species	Mouse
Immunogen	BCL1 cells expressing CD80.
Conjugation	Un-conjugated
Alternate Names	B7.1; CTLA-4 counter-receptor B7.1; CD28LG; T-lymphocyte activation antigen CD80; B7-1; CD28LG1; B7; LAB7; Activation B7-1 antigen; CD antigen CD80; BB1

Application Instructions

Application table	Application	Dilution
	FACS	Neat
	IHC-Fr	Assay-dependent

Application Note
FACS: Use 10 µl of the suggested working dilution to label 10⁶ cells in 100 µl.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS and 0.09% Sodium azide.
Preservative	0.09% Sodium azide

Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	CD80
Gene Full Name	CD80 molecule
Background	The protein encoded by this gene is a membrane receptor that is activated by the binding of CD28 or CTLA-4. The activated protein induces T-cell proliferation and cytokine production. This protein can act as a receptor for adenovirus subgroup B and may play a role in lupus neuropathy. [provided by RefSeq, Aug 2011]
Function	Involved in the costimulatory signal essential for T-lymphocyte activation. T-cell proliferation and cytokine production is induced by the binding of CD28, binding to CTLA-4 has opposite effects and inhibits T-cell activation. [UniProt]
Calculated Mw	33 kDa