molecular probes by life technologies

RAT anti-MOUSE CD80/B7-1

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Store at 2° to 8°C

Catalog No.	Form	Amount	Excitation	Peak Emission
A14722	FITC	0.05 mL (25 µg)	488 nm	519 nm
A14723	PE	0.25 mL (25 µg)	496 nm	578 nm
A14724	APC	0.25 mL (25 µg)	650 nm	660 nm

Product Description

CD80 is a type I transmembrane glycoprotein belonging to the immunoglobulin superfamily of cell surface receptors. It is constitutively expressed by dendritic cells, monocytes, and peritoneal macrophages. Expression of CD80 on B cells is upregulated after activation by various means including stimulation by LPS, IL-4, and surface Ig receptor cross linking with peak expression occurring between 48 and 72 hours post-activation. The binding of CD80/B7-1 with its ligands, CD28 and CD152/CTLA-4, act as co-stimulatory signal for T cells activated through the CD3/T cell receptor complex. However, the Rat anti-Mouse CD80/B7-1 Monoclonal Antibody does not block stimulation of T cells by natural antigen-presenting cells even though it can block binding of CTLA-4 to CD80.

Product Specifications

Clonality: Monoclonal
Host/Class: Rat IgG
Reactivity: Mouse CD80/B7-1
Immunogen: Dibutyryl cAMP-Activated 5C2 cells
Alternate Names: B7-1
Apparent MW: 44–60 kDa
Gene ID: 12519
Sequence Identity: Mouse
Clone/PAD: 1G10
Isotype: IgG_{2a}
Lot: See product label

Product Applications

Applications reported for the Rat anti-Mouse CD80/B7-1 mAb include flow cytometry, immunoprecipitation, and *in vivo* and *in vitro* blocking of ligand binding.

Because conditions may vary, it is recommended that each investigator determine the optimal amount of antibody to be used for each application.

Storage and Handling

Store reagents at 2° to 8°C. If the reagent is being diluted, it is recommended that only the quantity to be used within one week be diluted. Cells should be analyzed within 18 hours of staining for best results.
Avoid light exposure with fluorochrome-conjugated antibodies. Use dim light during handling, incubation with cells, and prior to analysis.

Stability

When stored as instructed, expires one year from date of receipt unless otherwise indicated on product label.

Storage Buffer

Phosphate buffered saline (PBS) with 0.1% sodium azide, and a non-BSA stabilizing agent. FITC conjugates contain PBS with 0.1% sodium azide.

Caution: Sodium azide is an extremely toxic and dangerous compound particularly when combined with acids or metals. Properly dispose of solutions containing sodium azide.

7335 Executive Way • Frederick • MD 21704 • E-mail: techsupport@lifetech.com

Product Documentation

To obtain a Certificate of Analysis or Safety Data Sheets (SDSs), visit **www.lifetechnologies.com/support**.

Related Products

Product Name	Quantity	Catalog no.
AbC™ Anti-Mouse Bead Kit	1 kit	A10344
AbC™ anti-Rat/Hamster Bead Kit	1 kit	A10389
Protein A Agarose	5 mL	15918-014
Recombinant Protein G (rProtein G) Agarose	5 mL	15920-010

Explanation of symbols

Symbol	Description	Symbol	Description
REF	Catalogue Number	LOT	Batch code
RUO	Research Use Only	IVD	*In vitro* diagnostic medical device
	Use by		Temperature limitation
	Manufacturer	EC REP	European Community authorised representative
[-]	Without, does not contain	[+]	With, contains
	Protect from light		Consult accompanying documents
	Directs the user to consult instructions for use (IFU), accompanying the product.		

Limited Product Warranty

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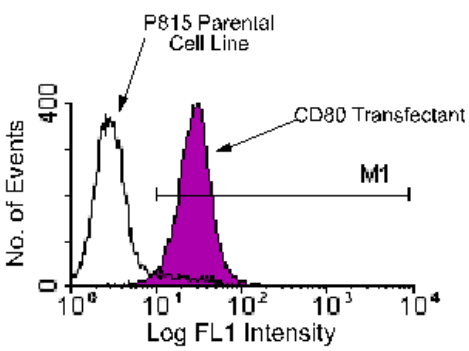

Rat anti-Mouse CD80/B7-1-FITC

Figure 1 Two-color analysis of CD80/B7-1 expression on P815 cells.

P815 cells transfected with CD80 or non-transfected P815 control cells were stained with Rat anti-Mouse CD80/B7-1-FITC Monoclonal Antibody (Cat. no. A14722). Large cells were then gated and analyzed on a FACScan™ flow cytometer (BDIS, San Jose, CA).

Note: All flow cytometric data shown may not necessarily have been generated using the enclosed lot of reagent. For this reason, and due to differences in flow cytometers and cytometer settings, results may vary from those illustrated above. It is suggested that investigators titrate reagents to determine optimal conditions for use in their systems.

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