

Technical Data Sheet

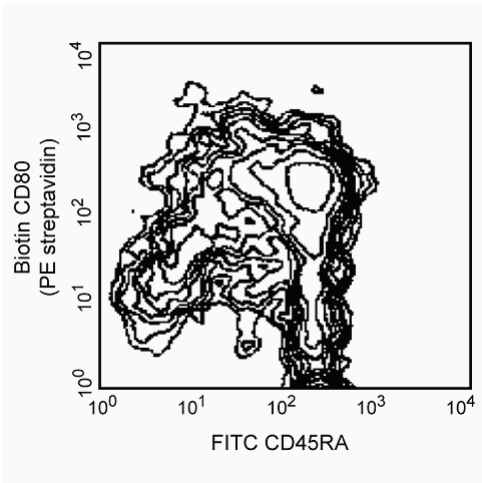
Biotin Mouse Anti-Rat CD80

Product Information

Material Number:	555013
Alternate Name:	B7-1
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	3H5
Immunogen:	Rat HTLV-1-transformed T-cell line Lewis-S1
Isotype:	Mouse (BALB/c) IgG1, κ
Reactivity:	QC Testing: Rat
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 3H5 antibody reacts with CD80 (B7-1), a member of the Ig superfamily of transmembrane proteins. CD80, 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. CD80 is predominantly expressed on antigen-presenting cells. It can be induced on splenic B cells by *in vitro* polyclonal activation such as LPS treatment. 3H5 mAb is reported to block the costimulatory function of rat CD80 and to immunoprecipitate CD80 from Lewis-S1 cell lysates.



CD80 expression on spleen cells. 72-hour LPS-stimulated LOU splenocytes were simultaneously stained with FITC-conjugated anti-rat CD45RA mAb OX-33 (Cat. no. 554883) and biotinylated mAb 3H5, followed by Streptavidin-PE (Cat. no. 554061). Viable lymphocyte blasts are represented. Flow cytometry was performed on a BD FACScan™ flow cytometry system.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with biotin under optimum conditions, and unreacted biotin was removed. Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested
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Recommended Assay Procedure:

Since this antigen is expressed at low density, it may be desirable to amplify staining by using a biotinylated second-step reagent followed by a "bright" third-step reagent, such as Streptavidin-PE (Cat. no. 554061).

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Suggested Companion Products

Catalog Number	Name	Size	Clone
554061	PE Streptavidin	0.5 mg	(none)
554883	FITC Mouse Anti-Rat CD45RA	0.5 mg	OX-33
550615	Biotin Mouse IgG1 κ Isotype Control	0.25 mg	MOPC-31C

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
3. 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

Bluestone JA. New perspectives of CD28-B7-mediated T cell costimulation. *Immunity*. 1995; 2(6):555-559.(Biology)
Damoiseaux JG, Yagita H, Okumura K, van Breda Vriesman PJ. Costimulatory molecules CD80 and CD86 in the rat; tissue distribution and expression by antigen-presenting cells. *J Leukoc Biol*. 1998; 64(6):803-809.(Biology: Immunoprecipitation)
Maeda K, Sato T, Azuma M, Yagita H, Okumura K. Characterization of rat CD80 and CD86 by molecular cloning and mAb. *Int Immunol*. 1997; 9(7):993-1000. (Immunogen)