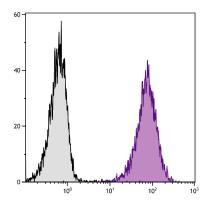
# SouthernBiotech 1



## Rat Anti-Mouse CD80

Cat. No.	Format	Size
1730-01	Purified (UNLB)	0.5 mg
1730-02	Fluorescein (FITC)	0.5 mg
1730-08	Biotin (BIOT)	0.5 mg
1730-09	R-phycoerythrin (PE)	0.1 mg
1730-09L	R-phycoerythrin (PE)	0.2 mg
1730-11	Allophycocyanin (APC)	0.1 mg
1730-13	Spectral Red® (SPRD)	0.1 mg
1730-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg



DBA/2 mouse mastocytoma cell line P815 and mB7.1-lg transfected P815 cells were stained with Rat Anti-Mouse CD80-APC (SB Cat. No. 1730-11).

#### **Overview**

Clone 1G10

 Isotype
 Rat (Lewis) IgG2ak

 Immunogen
 Activated 5C2 cells

 Specificity
 Mouse CD80; Mr 52-55 kDa

Alternate Name(s) B7-1, Ly-53

## **Description**

CD80 (B7-1) is a type I transmembrane glycoprotein and a member of 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 crosslinking with peak expression occurring between 48 and 72 hours post-activation. The interaction of CD80 with its ligands, CD28 and CD152 (CTLA-4), provides a potent costimulatory signal for T cells activated through the CD3/T cell receptor complex. The monoclonal antibody 1G10 blocks binding of CTLA-4 to CD80 but it does not block stimulation of T cells by natural antigen-presenting cells.

## **Applications**

FC – Quality tested <sup>1-12</sup> IP – Reported in literature <sup>2</sup> Block – Reported in literature <sup>1-3</sup>

#### **Working Dilutions**

Flow Cytometry FITC and BIOT conjugates  $\leq 1 \mu g/10^6 \text{ cells}$ 

PE, APC, and SPRD conjugates  $\leq$  0.2  $\mu$ g/10 $^6$  cells For flow cytometry, the suggested use of these reagents is in a final volume of 100  $\mu$ L

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Other Applications Since applications vary, you should determine the optimum working dilution for the product that is

appropriate for your specific need.

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## **Handling and Storage**

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. No
  preservatives or amine-containing buffer salts added. Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL or 0.2 mg in 2.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. Do not freeze!
- The allophycocyanin (APC) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN<sub>3</sub> and a stabilizing agent. Store at 2-8°C. Do not freeze!
- The Spectral Red<sup>®</sup> (SPRD) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. Do not freeze!
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of PBS. Contains no
  preservative; handle under aseptic conditions. Store at 2-8°C or aliquot into smaller volumes and store at -20°C. Avoid multiple
  freeze / thaw cycles.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

#### Warning

Some reagents contain sodium azide. Please refer to product specific SDS.

#### References

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- 10. Jacobsen JT, Lunde E, Sundvold-Gjerstad V, Munthe LA, Bogen B. The cellular mechanism by which complementary Id⁺ and anti-Id antibodies communicate: T cells integrated into idiotypic regulation. Immunol Cell Biol. 2010;88:515-22. (FC)
- 11. Grodeland G, Mjaaland S, Roux KH, Fredriksen AB, Bogen B. DNA vaccine that targets hemagglutinin to MHC class II molecules rapidly induces antibody-mediated protection against influenza. J Immunol. 2013;191:3221-31. (FC)
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