

#60712  
store at +4C**CD86/B7-2 (GL-1) Rat mAb (PE Conjugate)**

**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
FC-FP, FC-L	M	Endogenous	Rat IgG2a kappa	#P42082	12524

**Product Usage Information**

For optimal flow cytometry results, we recommend 0.125 µg of antibody per test.

**Application**

Flow Cytometry (Fixed/Permeabilized)  
Flow Cytometry (Live)

**Dilution**

1:160  
1:160

**Storage**

Supplied in 10 mM NaH<sub>2</sub>PO<sub>4</sub>, 150 mM NaCl, 0.09% NaN<sub>3</sub>, 0.1% gelatin, pH 7.2. This product is stable for 12 months when stored at 4°C. Do not aliquot the antibody. Protect from light. Do not freeze.

**Specificity/Sensitivity**

CD86/B7-2 (GL-1) Rat mAb (PE Conjugate) recognizes endogenous levels of total CD86/B7-2 protein. This antibody detects an epitope within the extracellular domain.

**Source / Purification**

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation.

**Description**

This Cell Signaling Technology antibody is conjugated to PE and tested in-house for direct flow cytometric analysis in mouse cells.

**Background**

CD80 (B7-1, BB1) and CD86 (B7-2, B70) are members of the B7 family of cell surface ligands that regulate T cell activation and immune responses. CD80 is expressed on activated antigen presenting cells, including dendritic cells, B cells, monocytes, and macrophages. CD86 is expressed on resting monocytes, dendritic cells, activated B lymphocytes, and can be further upregulated in the presence of inflammation (1-3). CD80 and CD86 are ligands for CD28, which functions as a T cell costimulatory receptor. Interaction of CD28 with CD80 or CD86 provides the second signal required for naive T cell activation, T cell proliferation, and acquisition of effector functions (3-7). Alternatively, CD80 and CD86 also act as ligands to CTLA-4, which results in the downregulation of T cell activity (3,7-9). The GL-1 antibody is used as a marker for CD86 expression on B cells, macrophages, and dendritic cells.

**Background References**

- Freeman, G.J. et al. (1989) *J Immunol* 143, 2714-22.
- Azuma, M. et al. (1993) *Nature* 366, 76-9.
- Adams, A.B. et al. (2016) *J Immunol* 197, 2045-50.
- Linsley, P.S. et al. (1990) *Proc Natl Acad Sci U S A* 87, 5031-5.
- Gimmi, C.D. et al. (1991) *Proc Natl Acad Sci U S A* 88, 6575-9.
- Harding, F.A. et al. (1992) *Nature* 356, 607-9.
- Collins, A.V. et al. (2002) *Immunity* 17, 201-10.
- Linsley, P.S. et al. (1991) *J Exp Med* 174, 561-9.
- Krummel, M.F. and Allison, J.P. (1995) *J Exp Med* 182, 459-65.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Applications Key**

**FC-FP:** Flow Cytometry (Fixed/Permeabilized) **FC-L:** Flow Cytometry (Live)

**Cross-Reactivity Key**

**M:** Mouse

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