

Pacific Blue™ anti-mouse CD48

Catalog # / Size: 1117090 / 100 µg
1117085 / 25 µg

Clone: HM48-1

Isotype: Hamster IgG

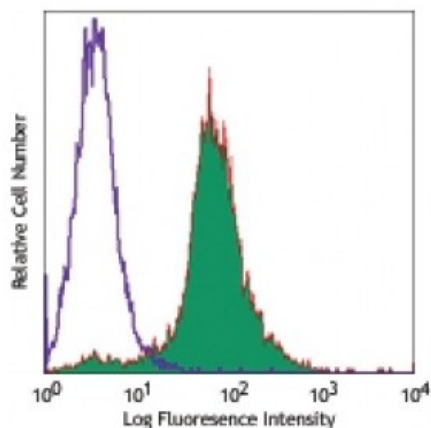
Immunogen: Mouse T lymphoma MBL-2

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with Pacific Blue™ under optimal conditions. The solution is free of unconjugated Pacific Blue™.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5



C57BL/6 mouse splenocytes stained with Pacific blue™ HM48-1

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 microg per 10^6 cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

Application Notes: The HM48-1 antibody is useful for blocking *in vitro* and *in vivo* CD48 mediated interactions. Additional reported applications (for the relevant formats) include: immunoprecipitation¹, costimulation of T cell proliferation^{1,2}, blocking of CD48-CD2 interaction¹, and inhibition of CTL activity and graft rejection^{1,2}. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 103408). For *in vivo* studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 103430) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/microg).

Application References: 1. Kato K, *et al.* 1992. *J. Exp. Med.* 176:1241. (IP, Costim, Block)
2. Qin L, *et al.* 1994. *J. Exp. Med.* 179:341. (Costim, Block)
3. Grassinger J, *et al.* 2012. *Cytokine*. 58:518. [PubMed](#)
4. Charmsaz S, *et al.* 2015. *PLoS One*. 10:130692. [PubMed](#)

Description: CD48 is a 45 kD GPI-anchored glycoprotein also known as BCM1, Blast-1 (human), and OX-45 (rat). It is a member of the Ig superfamily, expressed on T and B cells and monocytes/macrophages. It plays a role in adhesion and T cell recognition. The primary ligands for CD48 are CD2 and CD244.

Antigen References: 1. Barclay AN, *et al.* 1997. *The Leukocyte Antigen FactsBook* Academic Press.
2. Flament C, *et al.* 1996. *Hum. Immunol.* 46:82.
3. Van der Merwe PA, *et al.* 1995. *Curr. Biol.* 5:74.

4. Latchman Y