

Brilliant Violet 421™ anti-mouse CD48

Catalog # / Size: 1117135 / 125 µl
1117140 / 50 µg

Clone: HM48-1

Isotype: Hamster IgG

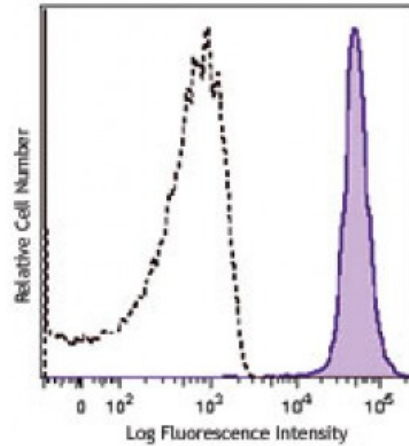
Immunogen: Mouse T lymphoma MBL-2

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.

Formulation: microL size: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).
microg size: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

Concentration: microL size: lot-specific



C57BL/6 mouse splenocytes were stained with CD48 (clone HM48-1) Brilliant Violet 421™ (filled histogram) or Armenian hamster IgG Brilliant Violet 421™ isotype control (open histogram).

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 using the microL size, the suggested use of this reagent is ≤5 microL per million cells or 5 microL per 100 microL of whole blood. For flow cytometric staining using the microg size, the suggested use of this reagent is ≤0.25 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

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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 1. Kato K, *et al.* 1992. *J. Exp. Med.* 176:1241. (IP, Costim, Block)
References: 2. Qin L, *et al.* 1994. *J. Exp. Med.* 179:341. (Costim, Block)

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