SONY

Product Data Sheet

Brilliant Violet 510™ anti-mouse CD48

Catalog # / Size: 1117215 / 50 µg

Clone: HM48-1

Isotype: Hamster IgG

Immunogen: Mouse T lymphoma MBL-2

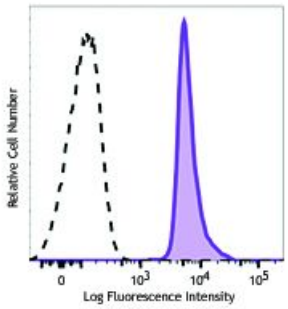
Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 510™ under optimal conditions.

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

Workshop Number: 750 under optimal conditions.

Concentration: 0.2



C57BL/6 mouse splenocytes were stained with CD48 (clone HM48-1) Brilliant Violet 510™ (filled histogram) or Armenian hamster IgG Brilliant Violet 510™ 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, the suggested use of this reagent is ≤0.5 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 510™ excites at 405 nm and emits at 510 nm. The bandpass filter 510/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 510™ is a trademark of Sirigen Group Ltd.

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)

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.

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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, *et al.* 1998. *J. Immunol.* 161:5809.

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