SONY

Product Data Sheet

Brilliant Violet 510™ anti-human CD38

Catalog # / Size: 2383060 / 100 tests
2383055 / 25 tests

Clone: HB-7

Isotype: Mouse IgG1, κ

Immunogen: BJAB human B cell line.

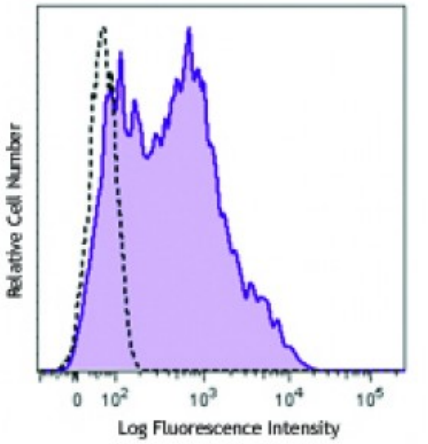
Reactivity: Human

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

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

Workshop Number: III 155

Concentration: Lot-specific



Human peripheral blood lymphocytes were stained with CD38 (clone HB-7) Brilliant Violet 510™ (filled histogram) or mouse IgG1, κ 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 ≤5 microL per million cells or 5 microL per 100 microL of whole blood. 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.

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Application Notes: Additional reported applications for the relevant formats include: indirect immunofluorescent staining1 and Western blotting2.

Application References:
1. Tedder T, *et al.* 1984. *Tissue Antigens.* 24:140. (IF)
2. Inoue S, *et al.* 1997. *J. Immunol.* 159:5226. (WB)
3. Zhao Y, *et al.* 2011. *J. Biol. Chem.* 286:22170.

Description: CD38 is a 45 kD type II transmembrane glycoprotein also known as T10. It is an

ADP-ribosyl hydrolase expressed at variable levels on hematopoietic cells and in some non-hematopoietic tissues (such as brain, muscle, and kidney). In humans, it is expressed at high levels on plasma cells and activated T and B cells, natural killer (NK) lymphocytes, myeloblasts, and erythroblasts. By functioning as both a cyclase and a hydrolase, CD38 mediates lymphocyte activation, adhesion, and the metabolism of cADPR and NAADP. CD31 is the ligand of CD38.

Antigen References:

1. Ferrero E, *et al.* 1999. *J. Leukoc. Biol.* 65:151.
2. Lund F, *et al.* 1995. *Immunol. Today* 16:469.