## Brilliant Violet 605™ anti-human CD38

Catalog # / Size: 2117655 / 25 tests

2117660 / 100 tests

Clone: HIT2

**Isotype:** Mouse IgG1, κ

Reactivity: Human

**Preparation:** The antibody was purified by affinity

chromatography and conjugated with Brilliant Violet 605™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 605™ and

unconjugated antibody.

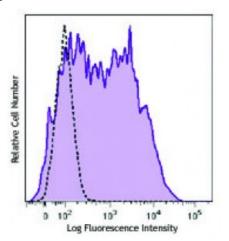
**Formulation:** Phosphate-buffered solution, pH 7.2,

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 HIT2) Brilliant Violet 605™ (filled histogram) or mouse lgG1, κ Brilliant Violet 605™ 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  $\leq 5$  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  $605^{\text{TM}}$  excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 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  $605^{\text{TM}}$  is a trademark of Sirigen Group Ltd.

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Application Notes:

Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections.<sup>6</sup>

Application References:

1. Kishimoto T, *et al.* Eds. 1997. Leucocyte Typing VI. Garland Publishing Inc. London.

- 2. Dieu M. 1998. J. Exp. Med. 188:373.
- 3. Esser M, et al. 2001. J. Virol. 75:6173.
- 4. Jeannin P, et al. 1999. J. Immunol. 162:2044.
- 5. Kapsogeorgou EK, et al. 2001. J. Immunol. 166:3107.
- 6. van der Voort R, et al. 1997. J. Exp. Med. 185:2121. (IHC)

- 7. Bende RJ, et al. 2003. Am. J. Pathol. 162:105.
- 8. Lehner M, et al. 2008. J. Leukoc. Biol. 83:883. PubMed
- 9. Yoshino N, et al. 2000. Exp. Anim. (Tokyo) 49:97. (FC)

**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, muscles, and kidney). In humans, it is expressed at high levels on plasma cells and activated T and B cells. 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 1. Ferrero E, et al. 1999. J. Leukoc. Biol. 65:151.

References: 2. Lund F, et al. 1995. Immunol. Today 16:469.