

**Brilliant Violet 785™ anti-human CD38**

**Catalog # / Size:** 2117645 / 25 tests  
2117650 / 100 tests

**Clone:** HIT2

**Isotype:** Mouse IgG1, κ

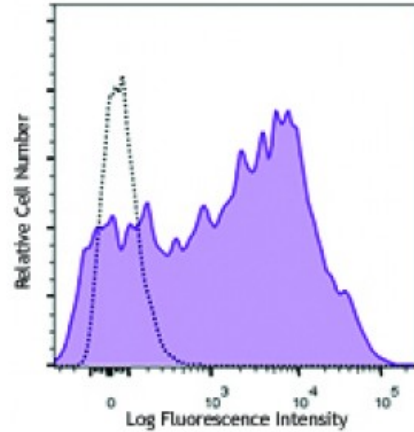
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 785™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 785™ 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 785™ (filled histogram) or mouse IgG1, κ Brilliant Violet 785™ 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 785™ excites at 405 nm and emits at 785 nm. The bandpass filter 780/60 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 785™ is a trademark of Sirigen Group Ltd.

This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

**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.