

**APC/Fire™ 810 anti-human CD38**

**Catalog # /** 2117750 / 100 tests  
**Size:** 2117745 / 25 tests

**Clone:** HIT2

**Isotype:** Mouse IgG1, κ

**Immunogen:** Concentrated supernatant from PMA-activated human peripheral blood leukocytes

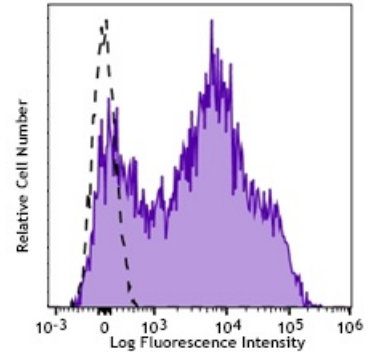
**Reactivity:** Human, Other

**Preparation:** The antibody was purified by affinity chromatography and conjugated with APC/Fire™ 810 under optimal conditions.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA)

**Workshop Number:** III 155

**Concentration:** Lot-specific

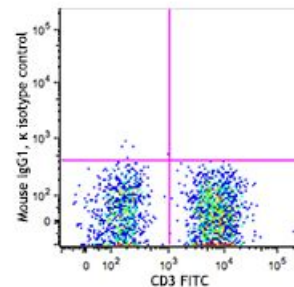


Human peripheral blood lymphocytes were stained with CD38 (clone HIT2) APC/Fire™ 810 (filled histogram) or cells were left unstained (open histogram).

**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 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.



\* APC/Fire™ 810 has a maximum excitation of 650 nm and a maximum emission of 810 nm.

**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  
References:**

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