

**APC/Fire™ 750 anti-human CD38**

**Catalog # / Size:** 2117730 / 100 tests  
2117725 / 25 tests

**Clone:** HIT2

**Isotype:** Mouse IgG1, κ

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

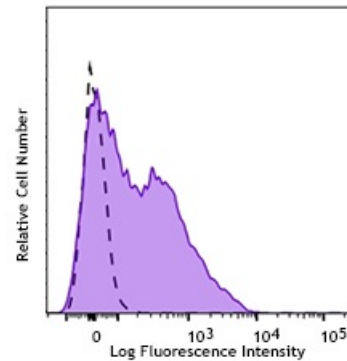
**Reactivity:** Human, Other

**Preparation:** The antibody was purified by affinity chromatography and conjugated with APC/Fire™ 750 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

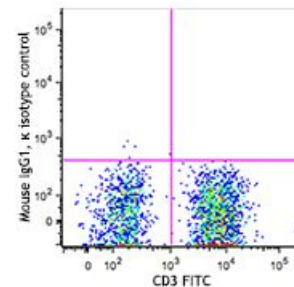


Human peripheral blood lymphocytes were stained with CD38 (Clone HIT2) APC/Fire™ 750 (filled histogram) or Mouse IgG1, κ APC/Fire™ 750 isotype control (open histogram).

**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 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.



\* APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 787 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.