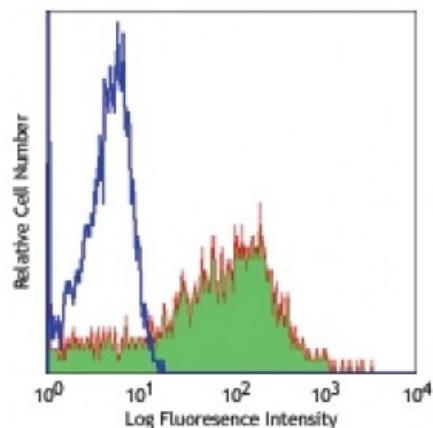


**Biotin anti-human CD38**

**Catalog # / Size:** 2117590 / 100 µg  
**Clone:** HIT2  
**Isotype:** Mouse IgG1, κ  
**Reactivity:** Human  
**Preparation:** The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.  
**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.  
**Workshop Number:** III 155  
**Concentration:** 0.5



Human peripheral blood lymphocytes stained with biotinylated HIT2, followed by Sav-PE

**Applications:**

**Applications:** Flow Cytometry, Immunohistochemistry

**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 ≤0.5 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

**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.