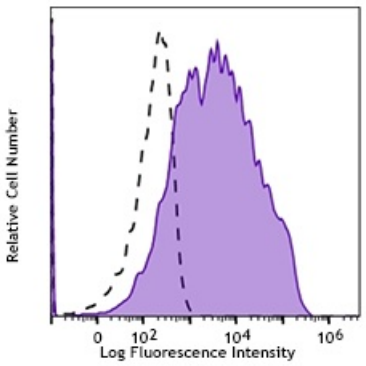
SONY

Product Data Sheet

Spark NIR™ 685 anti-human CD38

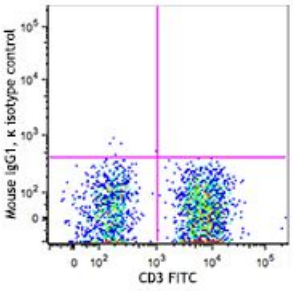
Catalog # / Size:	2117760 / 100 tests 2117755 / 25 tests
Clone:	HIT2
Isotype:	Mouse IgG1, κ
Immunogen:	Concentrated supernatant from PMA-activated human peripheral blood leukocytes
Reactivity:	Human, Other
Preparation:	The antibody was purified by affinity chromatography and conjugated with Spark NIR™ 685 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) Spark NIR™ 685 (filled histogram) or mouse IgG1, κ Spark NIR™ 685 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. It is recommended that the reagent be titrated for optimal performance for each application. * Spark NIR™ 685 has a maximum excitation of 665 nm and a maximum emission of 685 nm.
Application Notes:	Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections.[6]



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.