

Alexa Fluor® 647 anti-human CD317 (BST2, Tetherin)

Catalog # / Size: 2342020 / 100 tests
2342015 / 25 tests

Clone: RS38E

Isotype: Mouse IgG1, κ

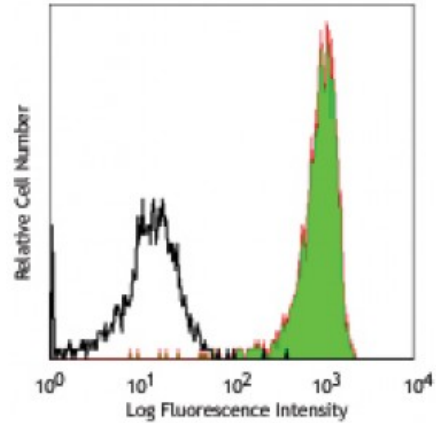
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 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: VIII

Concentration: Lot-specific



Human peripheral blood monocytes stained with RS38E Alexa Fluor® 647

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.

* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.

Application Notes: This product is manufactured and sold under a license and covered by a number of issued patents. Users who intend to file a patent relating to the use of this product, or who intend to develop therapeutic use of this antibody, are required to report to BioLegend in advance.

- Application References:**
1. Ishikawa J, *et al.* 1995. *Genomics* 26:527.
 2. Miyagi E, *et al.* 2011. *J. Virol.* 85:11981. [PubMed](#)
 3. Yokoyama T, *et al.* 2013. *Int. J. Cancer.* 132: 472. (FC) [PubMed](#)
 4. Grover JR, *et al.* 2013. *J. Virol.* 87:4650. [PubMed.](#)
 5. Jafari M, *et al.* 2014. *J Virol.* 88:5062. [PubMed](#)

Description: CD317, also known as BST2, Tetherin, and HM1.24, is a type II transmembrane GPI-protein with a molecular weight of about 29-33 kD. It is an interferon-induced protein expressed on dendritic cells, plasma cells, B lymphoblast cells, monocytes, granulocytes, T cells, NK cells, stromal cells, and some non-hematopoietic cells. BST2 inhibits cytokine production through interaction with ILT7 (CD85g). It is also involved in the regulation of B cell growth. More importantly, BST2 has been found to restrict the release of a number of viruses from infected cells, including all tested retroviruses (such as HIV-1) and some arenaviruses and filoviruses. In HIV-1 studies, it has been reported that BST2 retains the nascent virions on the surface of infected cells by incorporation of the protein into HIV-1 particles. HIV-1 Vpu is able to induce BST2 degradation.

Antigen 1. Sugamata OT, *et al.* 1999. *Biochem. Bioph. Res. Co.* 258:583.

- References:**
2. Neil SJ, *et al.* 2008. *Nature* 451:425.
 3. Fitzpatrick K, *et al.* 2010. *PLoS Pathog.* 6:e1000701.
 4. Azuma KS, *et*