SONY

Product Data Sheet

PE anti-human CD317 (BST2, Tetherin)

Catalog # / Size: 2342025 / 25 tests
2342030 / 100 tests

Clone: RS38E

Isotype: Mouse IgG1, κ

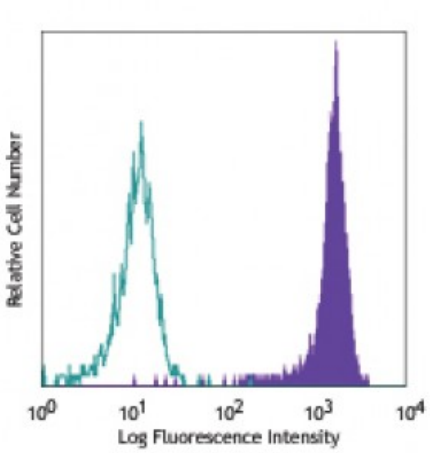
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.

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 PE

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 microL to 5 microL per test**. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

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. Fukuma A, *et al.* 2013. *PLoS One.* 8:61530. PubMed
5. Thippeshappa R, *et al.* 2013. *J Virol.* 87:6678. 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 virons 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 References:

1. Sugamata OT, *et al.* 1999. *Biochem. Bioph. Res. Co.* 258:583.
2. Neil SJ, *et al.* 2008. *Nature* 451:425.

3. Fitzpatrick K, *et al.* 2010. *PLoS Pathog.* 6:e1000701.
4. Azuma KS, *et*