

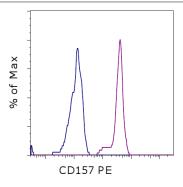
An Affymetrix Company

## **Anti-Human CD157 PE**

Catalog Number: 12-1579

Also known as: BST-1, BP-3/IF-7

RUO: For Research Use Only. Not for use in diagnostic procedures.



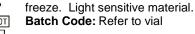
Staining of normal human peripheral blood cells with Mouse IgG1 K Isotype Control PE (cat. 12-4714) (blue histogram) or Anti-Human CD157 PE (purple histogram). Cells in the monocyte gate were used for analysis.

#### **Product Information**

Contents: Anti-Human CD157 PE Catalog Number: 12-1579 Clone: eBioSY11B5 (SY11B5) Concentration: 5 uL (0.125 ug)/test Host/Isotype: Mouse IgG1, kappa



**Formulation:** aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer **Temperature Limitation:** Store at 2-8°C. Do not





Use By: Refer to vial Caution, contains Azide



The eBioSY11B5 monoclonal antibody recognizes human CD157 (Mo5, BST-1). CD157 is a 42-45 kDa, GPI-anchored protein with structural and functional similarities with CD38. CD157 was initially cloned because of its expression on monocytes and macrophages, and was subsequently discovered to be the same protein named BST-1, discovered for its expression on bone marrow stromal cells and its ability to stimulate the proliferation of a mouse pre-B cell line. CD157 is a pleiotropic ectoenzyme and is thought to act independently as an enzyme and receptor. Similar to CD38, CD157 is involved in the metabolism of NAD+ and this activity may be involved in regulating intracellular Ca2+ levels. As a receptor, upon binding of its putative ligand, CD157 is thought to initiate a signal transduction cascade resulting in the phosphorylation of cytoplasmic proteins including focal adhesion kinase (FAK). The mechanism and functional significance of CD157-initiated signal transduction remain to be fully characterized.

### **Applications Reported**

This eBioSY11B5 (SY11B5) antibody has been reported for use in flow cytometric analysis.

## **Applications Tested**

This eBioSY11B5 (SY11B5) antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood leukocytes. This can be used at 5  $\mu$ L (0.125  $\mu$ g) per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test.

## References

Ortolan E, Vacca P, Capobianco A, Armando E, Crivellin F, Horenstein A, Malavasi F. CD157, the Janus of CD38 but with a unique personality. Cell Biochem Funct. 2002 Dec;20(4):309-22. Review.

Muraoka O, Tanaka H, Itoh M, Ishihara K, Hirano T. Genomic structure of human BST-1. Immunol Lett. 1996 Dec 1;54(1):1-4.

Kaisho T, Ishikawa J, Oritani K, Inazawa J, Tomizawa H, Muraoka O, Ochi T, Hirano T. BST-1, a surface molecule of



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bone marrow stromal cell lines that facilitates pre-B-cell growth. Proc Natl Acad Sci U S A. 1994 Jun 7;91(12):5325-9.

Goldstein SC, Todd RF 3rd. Structural and biosynthetic features of the Mo5 human myeloid differentiation antigen. Tissue Antigens. 1993 Apr;41(4):214-8.

## **Related Products**

12-4714 Mouse IgG1 K Isotype Control PE (P3.6.2.8.1)