

DESCRIPTION

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| Species Reactivity | Human |
| Specificity | Detects human CD157 in direct ELISAs. |
| Source | Monoclonal Mouse IgG ₁ Clone # 534509 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | NS0 mouse myeloma cell line transfected with human CD157 Gly29-Lys292 Accession # Q10588 |
| Conjugate | Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm |
| Formulation | Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|-----------------------|---------------------------------|-------------------------------------|
| Flow Cytometry | 0.25-1 µg/10 ⁶ cells | Human peripheral blood granulocytes |

PREPARATION AND STORAGE

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| Shipping | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| Stability & Storage | Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied. |

BACKGROUND

CD157, also known as Bone Marrow Stromal Cell Antigen 1 (BST-1), is a glycosyl phosphatidylinositol anchored membrane protein that belongs to the CD38 family (1). CD157 was discovered in a bone marrow stromal cell line where it facilitates pre-B-cell growth (2, 3). Along with CD38, CD157 is a bifunctional ectoenzyme that exhibits both ADP-ribosyl cyclase and cyclic ADP ribose hydrolase activities (2). It may play a role in rheumatoid arthritis (RA) due to its enhanced expression in RA-derived bone marrow stromal cell lines (3). CD157 has been predicted to function as a cell surface receptor and an immunoregulatory molecule (4).

References:

- Hussain, A. M. M. *et al.* (1998) *Protein Express. Purif.* **12**:133.
- Sato, A. *et al.* (1999) *Biochem. J.* **337**:491.
- Kaisho, T. *et al.* (1994) *Proc. Natl. Acad. Sci. USA* **91**:5325.
- Ortolan, E. *et al.* (2002) *Cell Biochem. Funct.* **20**:309.

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