

DESCRIPTION

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| Species Reactivity | Human |
| Specificity | Detects human CD157 in direct ELISAs. |
| Source | Monoclonal Mouse IgG ₁ Clone # 534524 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | NS0 mouse myeloma cell line transfected with human CD157 Gly29-Lys292 Accession # Q10588 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS. |

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.

ELISA This antibody functions as an ELISA detection antibody when paired with Mouse Anti-Human CD157 Monoclonal Antibody (Catalog # [MAB47361](#)).
This product is intended for assay development on various assay platforms requiring antibody pairs.

PREPARATION AND STORAGE

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| Reconstitution | Reconstitute at 0.5 mg/mL in sterile PBS. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

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:

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