

DESCRIPTION

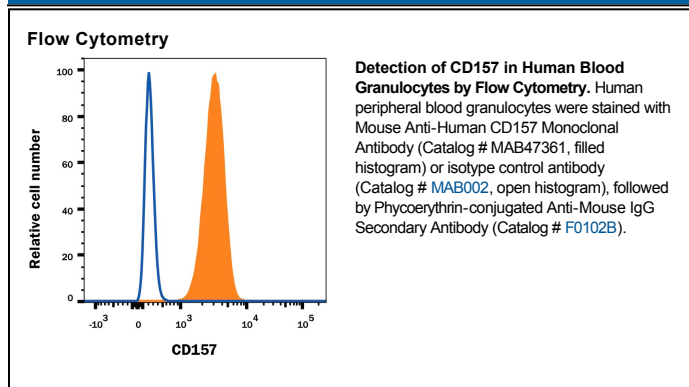
Species Reactivity	Human
Specificity	Detects human CD157 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 534509
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0 mouse myeloma cell line transfected with human CD157 Gly29-Lys292 Accession # Q10588
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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.

	Recommended Concentration	Sample
Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA



PREPARATION AND STORAGE

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.