

## **Human CD157 Biotinylated Antibody**

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: BAF4736

DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human CD157 in Western blots. In Western blots, approximately 10% cross-reactivity with recombinant mouse CD157 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human CD157 Gly29-Lys292 Accession # Q10588
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

## 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
Western Blot	0.1 μg/mL	Recombinant Human CD157 (Catalog # 4736-AC)

PREPARATION AND STORAGE		
Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.	
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.	
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.	
	<ul> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> </ul>	
	<ul> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> </ul>	
	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.

