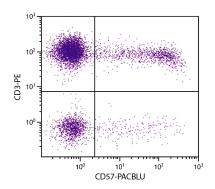
SouthernBiotech 1



Mouse Anti-Human CD57

Cat. No.	Format	Size
9665-01	Purified (UNLB)	0.1 mg
9665-02	Fluorescein (FITC)	100 tests
9665-08	Biotin (BIOT)	100 tests
9665-09	R-phycoerythrin (PE)	100 tests
9665-13	Spectral Red [®] (SPRD)	100 tests
9665-26	Pacific Blue™ (PACBLU)	100 tests
9665-31	Alexa Fluor® 647 (AF647)	100 tests



Human peripheral blood lymphocytes were stained with Mouse Anti-Human CD57-PACBLU (SB Cat. No. 9665-26) and Mouse Anti-Human CD3-PE (SB Cat. No. 9515-09).

Overview

Clone NK-1

Isotype Mouse (BALB/c) IgMκ

Immunogen Membrane extract of the human lymphoblastoid cell line HSB-2

Specificity Human CD57; Mr 110 kDa **Alternate Name(s)** HNK-1, Leu-7, B3GAT1

Workshop N/A

Description

CD57 represents a 110 kDa oligosaccharide antigenic determinant present on a variety of polypeptides, lipids, and chondroitan sulfate proteoglycans. It is expressed on 7-35% of normal peripheral blood lymphocytes, including subsets of NK cells and CD8⁺ T lymphocytes. The carbohydrate is expressed on various cell adhesion molecules in the nervous system and is suggested to play a role in cell–cell and cell–substrate interactions.

Applications

FC – Quality tested 1-4

IHC-FS – Reported in literature ⁵

IHC-PS – Reported in literature 6-8

ICC – Reported in literature 2,3

IP – Reported in literature 8

WB – Reported in literature ^{2,3,8,9}

Purification – Reported in literature 9

Block – Reported in literature ^{2,8}

Adhesion – Reported in literature ²

Working Dilutions

Flow Cytometry Purified (UNLB) antibody

 $\leq 1 \mu g/10^6 \text{ cells}$

FITC, BIOT, PE, SPRD, PACBLU, and AF647 conjugates

10 μL/10⁶ cells

For flow cytometry, the suggested use of these reagents is in a final volume of 100 μ L

Other Applications

Since applications vary, you should determine the optimum working dilution for the product that is

appropriate for your specific need.

For Research Use Only. Not for Diagnostic or Therapeutic Use.

Email: info@southernbiotech.com • Website: www.southernbiotech.com

Handling and Storage

- The purified (UNLB) antibody is supplied as 0.1 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. No preservatives or amine-containing buffer salts added. Store at 2-8°C.
- The fluorescein (FITC), Pacific Blue™ (PACBLU), and Alexa Fluor® 647 (AF647) conjugates are supplied as 100 tests in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 100 tests in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 100 tests in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. Do not freeze!
- The Spectral Red[®] (SPRD) conjugate is supplied as 100 tests in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C.
 Do not freeze!
- Protect fluorochrome conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific (M)SDS.

References

- 1. Abo T, Balch CM. A differentiation antigen of human NK and K cells identified by a monoclonal antibody (HNK-1). J Immunol. 1981;127:1024-9. (Immunogen, FC)
- Miura R, Ethell IM, Yamaguchi Y. Carbohydrate-protein interactions between HNK-1-reactive sulfoglucuronyl glycolipids and the proteoglycan lectin domain mediate neuronal cell adhesion and neurite outgrowth. J Neurochem. 2001;76:413-24. (FC, ICC, WB, Block, Adhesion)
- Yanagisawa M, Taga T, Nakamura K, Ariga T, Yu RK. Characterization of glycoconjugate antigens in mouse embryonic neural precursor cells. J Neurochem. 2005;95:1311-20. (FC, ICC, WB)
- 4. Bentebibel S, Schmitt N, Banchereau J, Ueno H. Human tonsil B-cell lymphoma 6 (BCL6)-expressing CD4⁺ T-cell subset specialized for B-cell help outside germinal centers. Proc Natl Acad Sci USA. 2011;108:E488-97. (FC)
- 5. Liu AY, Roudier MP, True LD. Heterogeneity in primary and metastatic prostate cancer as defined by cell surface CD profile. Am J Pathol. 2004;165:1543-56. (IHC-FS)
- 6. Jensen HK, Donskov F, Marcussen N, Nordsmark M, Lundbeck F, von der Maase H. Presence of intratumoral neutrophils is an independent prognostic factor in localized renal cell carcinoma. J Clin Oncol. 2009;27:4709-17. (IHC-PS)
- 7. Zou Y, Chen T, Han M, Wang H, Yan W, Song G, et al. Increased killing of liver NK cells by Fas/Fas ligand and NKG2D/NKG2D ligand contributes to hepatocyte necrosis in virus-induced liver failure. J Immunol. 2010;184:466-75. (IHC-PS)
- 8. Suzuki-Anekoji M, Suzuki M, Kobayashi T, Sato Y, Nakayama J, Suzuki A, et al. HNK-1 glycan functions as a tumor suppressor for astrocytic tumor. J Biol Chem. 2011;286:32824-33. (IHC-PS, IP, WB, Block)
- 9. Yoshihara Y, Oka S, Watanabe Y, Mori K. Developmentally and spatially regulated expression of HNK-1 carbohydrate antigen on a novel phosphatidylinositol-anchored glycoprotein in rat brain. J Cell Biol. 1991;115:731-44. (WB, Purification)

Alexa Fluor® 488, 647, 700 and Pacific Blue™ are provided under an agreement between Molecular Probes, Inc. (a wholly owned subsidiary of Invitrogen Corporation), and Southern Biotechnology Associates, Inc., and the manufacture, use, sale or import of this product may be subject to one or more U.S. patents, pending applications, and corresponding non-U.S. equivalents, owned by Molecular Probes, Inc. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The buyer cannot sell or otherwise transfer (a) this product (b) its components or (c) materials made using this product or its components to a third party or otherwise use this product or its components or materials made using this product or its components for Commercial Purposes. Commercial Purposes means any activity by a party for consideration and may include, but is not limited to: (1) use of the product or its components in manufacturing; (2) use of the product or its components for therapeutic, diagnostic or prophyladic purposes; or (4) resale of the product or its components, whether or not such product or its components are resold for use in research. For information on purchasing a license to this product for any other use, contact Molecular Probes, Inc., Business Development, 29851 Willow Creek Road, Eugene, OR 97402, USA, Tel: (541) 465-8300. Fax: (541) 335-0504.

Email: info@southernbiotech.com • Website: www.southernbiotech.com