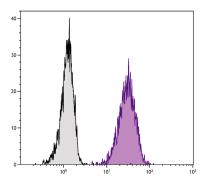




Mouse Anti-Human CD105

Cat. No.	Format	Size
9811-01	Purified (UNLB)	0.1 mg
9811-02	Fluorescein (FITC)	100 tests
9811-09	R-phycoerythrin (PE)	100 tests
9811-11	Allophycocyanin (APC)	100 tests
9811-30	Alexa Fluor® 488 (AF488)	100 tests
9811-31	Alexa Fluor® 647 (AF647)	100 tests



Human histiocytic lymphoma cell line U-937 was stained with Mouse Anti-Human CD105-APC (SB Cat. No. 9811-11).

Overview

Clone SN6

Isotype Mouse (BALB/c) IgG₁κ

Immunogen Antigen preparation isolated from cell membranes of leukemia cells derived from a patient with non-

T/non-B-cell acute lymphoblastic leukemia (ALL)

Specificity Human/Horse CD105; Mr 90 kDa

Alternate Name(s) Endoglin Workshop VI E108

Description

CD105, also known as endoglin, is a 90 kDa type II transmembrane glycoprotein that is expressed on the cell surface as a disulfide-linked homodimer and is found on endothelial cells. CD105 is one of several receptors for the various isoforms of $TGF\beta$ which in turn is one of a family of proteins involved in regulation of cell differentiation, migration of cells, and control on the immune response.

Applications

FC – Quality tested ⁸⁻¹¹
IHC-FS – Reported in literature ²
IHC-PS – Reported in literature ³
ICC – Reported in literature ^{4,11}
IP – Reported in literature ^{1,5,7}
WB-NR – Reported in literature ⁶
Purification – Reported in literature ⁷

Working Dilutions

Flow Cytometry Purified (UNLB) antibody \leq 1 μ g/10⁶ cells FITC, PE, APC, AF488, and AF647 conjugates 10 μ L/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.

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), Alexa Fluor[®] 488 (AF488), and Alexa Fluor[®] 647 (AF647) conjugates are supplied as 100 tests in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) and allophycocyanin (APC) conjugates are 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 SDS.

References

- Haruta Y, Seon BK. Distinct human leukemia-associated cell surface glycoprotein GP160 defined by monoclonal antibody SN6. Proc Natl Acad Sci USA. 1986;83:7898-902. (Immunogen, IP)
- 2. Toi H, Tsujie M, Haruta Y, Fujita K, Duzen J, Seon BK. Facilitation of endoglin-targeting cancer therapy by development/utilization of a novel genetically engineered mouse model expressing humanized endoglin (CD105). Int J Cancer. 2014 May 28. doi: 10.1002/ijc.28994. [Epub ahead of print] (IHC-FS)
- 3. Chung Y, Hou Y, Pan AC. Endoglin (CD105) expression in the development of haemorrhoids. Eur J Clin Invest. 2004;34:107-112. (IHC-PS)
- 4. Meng Q, Lux A, Holloschi A, Li J, Hughes JM, Foerg T, et al. Identification of Tctex2β, a novel dynein light chain family member that interacts with different transforming growth factor-β receptors. J Biol Chem. 2006;281:37069-80. (ICC)
- 5. Takahashi N, Kawanishi-Tabata R, Haba A, Tabata M, Haruta Y, Tsai H, et al. Association of serum endoglin with metastasis in patients with colorectal, breast, and other solid tumors, and suppressive effect of chemotherapy on the serum endoglin. Clin Cancer Res. 2001;7:524-32. (IP)
- 5. Shinojima N, Hossain A, Takezaki T, Fueyo J, Gumin J, Gao F, et al. TGF-β mediates homing of bone marrow-derived human mesenchymal stem cells to glioma stem cells. Cancer Res. 2012;73:2333-44. (WB)
- 7. Seon BK, Matsuno F, Haruta Y, Kondo M, Barcos M. Long-lasting complete inhibition of human solid tumors in SCID mice by targeting endothelial cells of tumor vasculature with antihuman endoglin immunotoxin. Clin Cancer Res. 1997;3:1031-44. (IP, Purification)
- 8. Røsland GV, Svendsen A, Torsvik A, Sobala E, McCormack E, Immervoll H, et al. Long-term cultures of bone marrow-derived human mesenchymal stem cells frequently undergo spontaneous malignant transformation. Cancer Res. 2009;69:5331-9. (FC)
- 9. Guasti L, Prasongchean W, Kleftouris G, Mukherjee S, Thrasher AJ, Bulstrode NW, et al. High plasticity of pediatric adipose tissue-derived stem cells: too much for selective skeletogenic differentiation?. Stem Cells Transl Med. 2012;1:384-95. (FC)
- 10. Schmitt A, Ehnert S, Schyschka L, Buschner P, Kühnl A, Döbele S, et al. Monocytes do not transdifferentiate into proper osteoblasts. ScientificWorldJournal. 2012;2012:384936. (FC)
- 11. De Schauwer C, Piepers S, Van de Walle GR, Demeyere K, Hoogewijs MK, Govaere JL, et al. In search for cross-reactivity to immunophenotype equine mesenchymal stromal cells by multicolor flow cytometry. Cytometry A. 2012;81:312-23. (FC, ICC, Horse Reactivity)

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