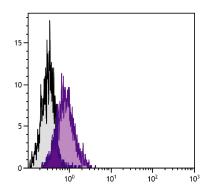




Rat Anti-Mouse CD105

Cat. No.	Format	Size
1860-01	Purified (UNLB)	0.5 mg
1860-26	Pacific Blue™ (PACBLU)	0.1 mg



BALB/c mouse endothelioma cell line bEnd.3 was stained with Rat Anti-Mouse CD105-PACBLU (SB Cat. No. 1860-26).

Overview

ImmunogenInflamed mouse skinSpecificityMouse CD105; Mr 90 kDa

Alternate Name(s) Endoglin

Description

CD105, also known as endoglin, is a disulfide-linked type II transmembrane homodimer that is predominantly expressed on vascular endothelial cells. It is also found on pre-erythroblasts, macrophages, and lymphoid and myeloid leukemic cells. Both mouse and human CD105 exhibit >70% sequence homology in their cytoplasmic domains with type III transforming growth factor β (TGF β) receptor. CD105 has been shown to be one of several receptors for the various isoforms of TGF β which in turn is one of a family of proteins involved in regulation of cell differentiation, migration of cells, and control of the immune response.

Applications

FC – Quality tested ^{2,7-9}
IHC-FS – Reported in literature ⁶
IP – Reported in literature ²
WB – Reported in literature ^{1,2,4,5}
Sep – Reported in literature ³

Working Dilutions

Flow Cytometry Purified (UNLB) antibody $\leq 1 \mu g/10^6 \text{ cells}$ PACBLU conjugate $\leq 1 \mu g/10^6 \text{ cells}$

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

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.

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Handling and Storage

- The purified (UNLB) antibody is supplied as 0.5 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 Pacific Blue™ (PACBLU) conjugate is supplied as 0.1 mg in 0.2 mL of PBS/NaN₃. Store at 2-8°C.
- 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. Ge AZ, Butcher EC. Cloning and expression of a cDNA encoding mouse endoglin, an endothelial cell TGF-β ligand. Gene. 1994;138:201-6. (Immunogen, WB, FC)
- 2. Raab U, Velasco B, Lastres P, Letamendía A, Calés C, Langa C, et al. Expression of normal and truncated forms of human endoglin. Biochem J. 1999;339:579-88. (FC, WB, IP)
- 3. Finkensieper A, Kieser S, Bekhite MM, Richter M, Mueller JP, Graebner R, et al. The 5-lipoxygenase pathway regulates vasculogenesis in differentiating mouse embryonic stem cells. Cardiovasc Res. 2010;86:37-44. (Sep)
- 4. Belik J, Jerkic M, McIntyre BA, Pan J, Leen J, Yu LX, et al. Age-dependent endothelial nitric oxide synthase uncoupling in pulmonary arteries of endoglin heterozygous mice. Am J Physiol Lung Cell Mol Physiol. 2009;297:L1170-8. (WB)
- 5. Jerkic M, Peter M, Ardelean D, Fine M, Konerding MA, Letarte M. Dextran sulfate sodium leads to chronic colitis and pathological angiogenesis in endoglin heterozygous mice. Inflamm Bowel Dis. 2010;16:1859-70. (WB)
- Wickersheim A, Kerber M, de Miguel LS, Plate KH, Machein MR. Endothelial progenitor cells do not contribute to tumor endothelium in primary and metastatic tumors. Int J Cancer. 2009;125:1771-7. (IHC-FS)
- Ren Y, Finckenstein FG, Abdueva DA, Shahbazian V, Chung B, Weinberg KI, et al. Mouse mesenchymal stem cells expressing PAX-FKHR form alveolar rhabdomyosarcomas by cooperating with secondary mutations. Cancer Res. 2008;68:6587-97. (FC)
- 8. Adhikari AS, Agarwal N, Wood BM, Porretta C, Ruiz B, Pochampally RR, et al. CD117 and Stro-1 identify osteosarcoma tumor-initiating cells associated with metastasis and drug resistance. Cancer Res. 2010;70:4602-12. (FC)
- Moorthy RK, Sam GA, Kumar SV, Chacko G, Mathews V, Chacko AG, et al. Intralesional mesenchymal stromal cell transplant in a rodent model of cortical cryoinjury. Neurol India. 2011;59:573-8. (FC)

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