Datasheet for ABIN93940

anti-Endoglin antibody (FITC)

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Overview

Quantity:	100 tests
Target:	Endoglin (ENG)
Reactivity:	Human, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Endoglin antibody is conjugated to FITC
Application:	Flow Cytometry (FACS)

Product Details

Immunogen:	Recombinant ***Vaccinia*** virus containing the human CD105 cDNA.
Clone:	MEM-226
Isotype:	IgG2a
Specificity:	The antibody MEM-226 reacts with an extracellular epitope of CD105 (Endoglin), a 90 kDa type I homodimerizing membrane glycoprotein expressed on vascular endothelial cells (small and large vessels), activated monocytes and tissue macrophages, stromal cells of certain tissues including bone marrow, pre-B lymphocytes in fetal marrow and erythroid precursors in fetal and adult bone marrow, it is also present on syncytiotrophoblast on placenta throughout pregnancy.
Cross-Reactivity (Details):	Human, Rat
Purification:	Purified antibody is conjugated with fluorescein isothiocyanate (FITC) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

Target Details

Target:	Endoglin (ENG)
Alternative Name:	CD105 (ENG Products)
Background:	Endoglin,CD105 (endoglin) is a homodimeric transmembrane glycoprotein serving in presence of TGFbetaR-2 as a receptor for TGFbeta-1 and TGFbeta-3. CD105 is highly expressed on endothelial cells and promotes angiogenesis during wound healing, infarcts and in a wide range of tumours and its gene expression is stimulated by hypoxia. CD105 prevents apoptosis in hypoxic endothelial cells and also antagonises the inhibitory effects of TGFbeta-1 on vascular endothelial cell growth and migration. Normal cellular levels of CD105 are required for formation of new blood vessels.,Endoglin, END, ENG, HHT1, ORW1
Gene ID:	2022
UniProt:	P17813

Application Details

Application Notes:	Flow cytometry: The reagent is designed for analysis of human blood cells using 20 µL reagent / 100 µL of whole blood or 10^6 cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests.
Comment:	The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions. The reagent is free of unconjugated FITC and adjusted for direct use. No reconstitution is necessary.
Restrictions:	For Research Use only

Handling

Reconstitution:	No reconstitution is necessary.
Buffer:	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	**Do not freeze.** Avoid prolonged exposure to light.
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

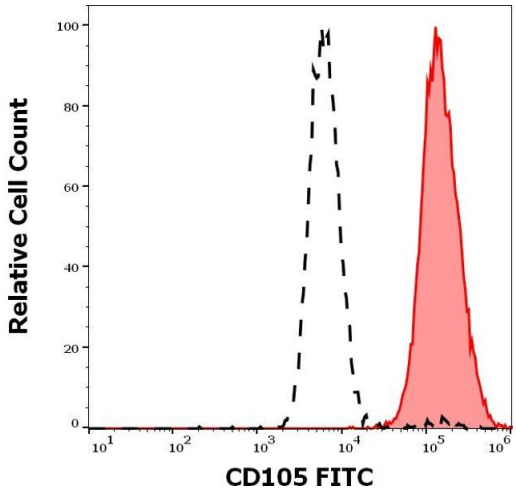
Publications

Product cited in:

Barale, Dentelli, Togliatto, Trombetta, Olgasi, Scozzari, Toppino, Morino, Brizzi: "High glucose via NOX-dependent ROS generation and AKT activity promotes adipose-derived stem cell de-differentiation." in: **Stem cells and development**, (2012) (PubMed).

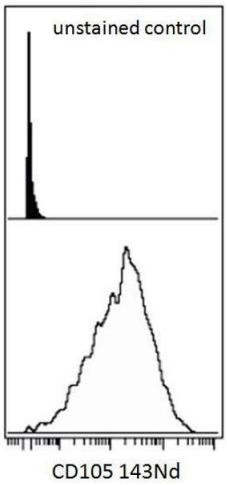
Schmidt, Achermann, Odermatt, Breymann, Mol, Genoni, Zund, Hoerstrup: "Prenatally fabricated autologous human living heart valves based on amniotic fluid derived progenitor cells as single cell source." in: **Circulation**, Vol. 116, Issue 11 Suppl, pp. I64-70, (2007) (PubMed).

Images



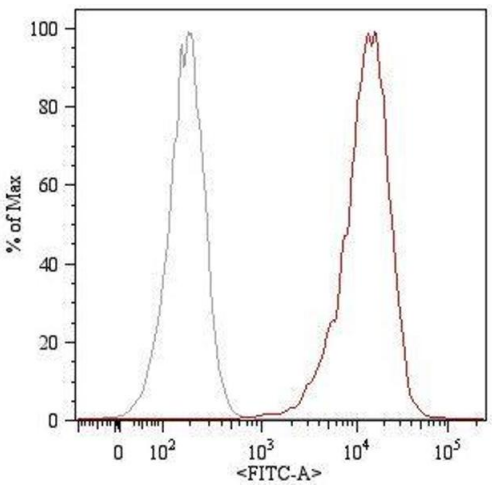
Flow Cytometry

Image 1. Separation of HUVEC cells stained using anti-human CD105 (MEM-226) FITC antibody (20 µL reagent per million cells in 100 µL of cell suspension, red-filled) from unstained HUVEC cells (black-dashed) in flow cytometry analysis (surface staining) of HUVEC cells.



Flow Cytometry

Image 2. Surface staining (mass cytometry) of hTERT cell line with anti-human CD105 () 143Nd. Gated on singlets.



Flow Cytometry

Image 3. Surface staining (flow cytometry) of HUVEC (human umbilical vein endothelial cells) with anti-human CD105 (MEM-226) FITC. Total viable cells were used for analysis.

