

30-2196PE-Cy7: PE-Cy7 Conjugated Anti-CD105 / Endoglin Monoclonal Antibody (Clone:MEM-226)

Clonality :	Monoclonal
Clone Name :	MEM-226
Application :	FACS
Reactivity :	Rat,Human
Conjugate :	PE/CY7
Gene :	ENG
Gene ID :	2022
Uniprot ID :	P17813
Alternative Name :	ENG,END,Endoglin,HHT1,ORW1
Isotype :	Mouse IgG2a
Immunogen Information :	Recombinant <i>Vaccinia</i> virus containing the human CD105 cDNA.

Description

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.

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.

Product Info

Amount :	100 tests
Purification :	Purified antibody is conjugated with activated tandem dye of R-phycoerythrin-cyanine 7 (PE-Cy7) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
Content :	Formulation: Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Storage condition :	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light.
Amino Acid :	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Application Note

Flow cytometry: The reagent is designed for analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 106 cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

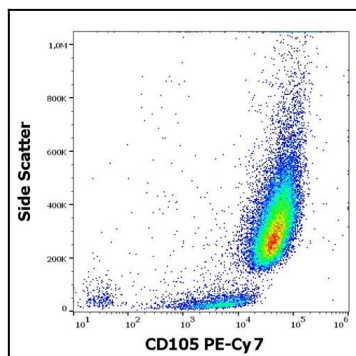


Figure 1: Flow cytometry surface staining pattern of HUVEC cell suspension stained using anti-human CD105 (MEM-226) PE-Cy7 antibody (4 µl reagent per million cells in 100 µl of cell suspension).

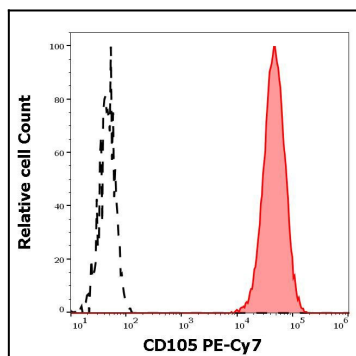


Figure 2: Separation of HUVEC cells (red-filled) from HEK-293 cells (black-dashed) in flow cytometry analysis (surface staining) stained using anti-human CD105 (MEM-226) PE-Cy7 antibody (4 µl reagent per million cells in 100 µl of cell suspension).