

30-1313AC: APC Conjugated Anti-CD105 / Endoglin Monoclonal Antibody (Clone:MEM-229)

Clonality :	Monoclonal
Clone Name :	MEM-229
Application :	FACS
Reactivity :	Pig,Human
Conjugate :	APC
Gene :	ENG
Gene ID :	2022
Uniprot ID :	P17813
Alternative Name :	ENG,END,Endoglin,HHT1,ORW1
Isotype :	Mouse IgG2a
Immunogen Information :	Recombinant Vaccinia virus containing the human CD105 (L-isoform) cDNA.

Description

CD105 (Endoglin) is a homodimeric transmembrane glycoprotein serving in presence of TGF betaR-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-229 recognizes an extracellular epitope of CD105 (Endoglin), a 90 kDa type I integral membrane homodimer 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 allophycocyanin (APC) 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 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 10 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.

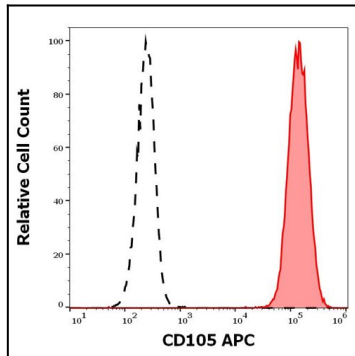


Figure 1: Separation of HUVEC cells stained using anti-human CD105 (MEM-229) APC antibody (10 μ l reagent per million cells in 100 μ l of cell suspension, red-filled) from HUVEC cells stained using mouse IgG2a isotype control (MOPC-173) APC antibody (concentration in sample 5 μ g/ml, same as CD105 APC concentration, black-dashed) in flow cytometry analysis (surface staining).