

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

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	MEM-229
<b>Application :</b>	FACS
<b>Reactivity :</b>	Pig,Human
<b>Conjugate :</b>	APC
<b>Gene :</b>	ENG
<b>Gene ID :</b>	2022
<b>Uniprot ID :</b>	P17813
<b>Alternative Name :</b>	ENG,END,Endoglin,HHT1,ORW1
<b>Isotype :</b>	Mouse IgG2a
<b>Immunogen Information :</b>	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

<b>Amount :</b>	100 tests
<b>Purification :</b>	Purified antibody is conjugated with activated allophycocyanin (APC) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
<b>Content :</b>	Formulation: Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
<b>Storage condition :</b>	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 10<sup>6</sup> cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.

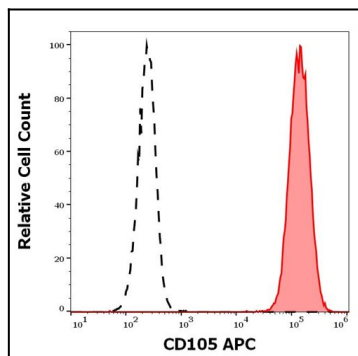


Figure 1: Separation of HUVEC cells stained using anti-human CD105 (MEM-229) APC antibody (10  $\mu$ l reagent per million cells in 100  $\mu$ l of cell suspension, red-filled) from HUVEC cells stained using mouse IgG2a isotype control (MOPC-173) APC antibody (concentration in sample 5  $\mu$ g/ml, same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