

30-2905AC: APC Anti-Hu CD141 Mab (M80)

Clonality :	Monoclonal
Clone Name :	M80
Application :	FACS
Reactivity :	Human
Conjugate :	APC
Gene :	CD141
Gene ID :	7056
Uniprot ID :	P07204
Alternative Name :	Thrombomodulin, fetomodulin, THBD, THRM, THPH12, TM
Isotype :	Mouse IgG1
Immunogen Information :	MV4-11 cell line

Description

CD141, also known as thrombomodulin or fetomodulin, is a single chain type I transmembrane glycoprotein serving as a receptor for thrombin and as an important cofactor in the protein C anticoagulant system, but it is also involved in embryonic and atherosclerotic plaque development. CD141 is expressed mainly on macrophages, monocytes, a subpopulation of myeloid dendritic cells, on platelets and endothelial cells, but also e.g. on keratinocytes (epithelium). After binding to thrombin, CD141 activates protein C, which degrades clotting factors Va and VIIIa, and as a consequence the amount of thrombin is reduced. Mutations in the CD141 gene can cause a thromboembolic disease known as inherited thrombophilia.

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.

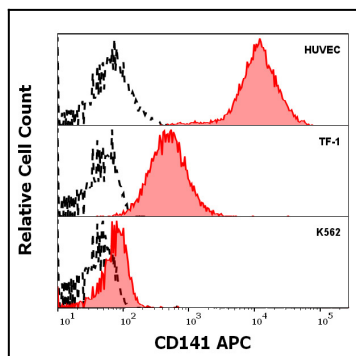


Figure 1: Anti-Hu CD141 APC antibody (clone M80) specificity verification by flow cytometry Anti-Hu CD141 APC antibody (concentration in sample 0.3 µg/ml, red-filled histogram) binds specifically to CD141 on surface of HUVEC cells with high expression of CD141 (upper panel) and also TF-1 cells with lower CD141 expression (middle panel), but not to surface of K562 cells non-expressing CD141 (lower panel). Level of non-specific binding was assessed using Mouse IgG1 isotype control APC antibody (MOPC-21) under same conditions (concentration in sample 0.3 µg/ml, black-dashed histogram).