Anti-Human CD105 Antibody, Clone 43A3, APC

Antibodies

Mouse monoclonal IgG1 antibody against human, mouse CD105 (endoglin), APC-conjugated

Catalog #60039AZ	100 Tests	5 µL/test
#60039AZ.1	25 Tests	5 µL/test

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Product Description

The 43A3 antibody reacts with CD105 (endoglin), an ~180 kDa cell surface glycoprotein which is a disulfide-bonded homodimer of ~90 kDa type I transmembrane subunits. CD105 is a component of the TGF-β receptor complex and is expressed by vascular endothelial smooth muscle cells, syncytiotrophoblasts of placenta and activated macrophages, and at relatively low levels by stromal fibroblasts. Its expression is also observed in some types of tumors, and levels are up-regulated on the endothelium during angiogenesis. In concert with signaling receptors, CD105 binds to TGF-β1 and TGF-β3 with high affinity, but does not bind TGF-β2. Other ligands reportedly include Activin A, BMP-2, and BMP-7. CD105 has important roles in angiogenesis, cardiovascular development, and vascular remodeling, and the protein serves a regulatory role in cytoskeletal reorganization by modulating the sites of focal adhesion and cellular migration. Certain mutations in CD105 result in the autosomal dominant disorder hereditary hemorrhagic telangiectasia.

Target Antigen Name:	CD105 (Endoglin)
Alternative Names:	Endoglin
Gene ID:	2022
Species Reactivity:	Human, Mouse
Host Species:	Mouse
Clonality:	Monoclonal
Clone:	43A3
Isotype:	IgG1, kappa
Immunogen:	L-cells transfected with human CD105
Conjugate:	APC (Allophycocyanin)

Applications

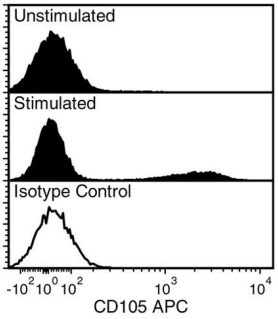
Verified:	FC
Reported:	FC
Special Applications:	This antibody clone has been verified for labeling human mesenchymal cells grown in MesenCult™ Proliferation Kit (Human; Catalog #05411).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) bovine serum albumin
Purification:	The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions. The solution is free of unconjugated APC.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. For product expiry date, please contact techsupport@stemcell.com.
Directions for Use:	For flow cytometry, the suggested use of this antibody is ≤ 5 µL per 1 x 10^6 cells in 100 µL. It is recommended that the antibody be titrated for optimal performance for each application.

Data



Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) cultured for 24 hours with or without lipopolysaccharide (LPS) and labeled with Anti-Human CD105 Antibody, Clone 43A3, APC. Histograms show labeling of PBMCs cultured in the absence (Unstimulated) or presence (Stimulated) of LPS. Labeling of LPS-stimulated PBMCs with a mouse IgG1, kappa isotype control antibody, APC is shown (solid line histogram).

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

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