## **Technical Data Sheet**

# PerCP-Cy™5.5 Mouse anti-Human CD105 (Endoglin)

#### Product Information

Material Number:	560819		
Alternate Name:	Endoglin; ENG; END; HHT1; ORW; ORW1		
Size:	100 tests		
Vol. per Test:	5 µl		
Clone:	266		
Immunogen:	Human Umbilical Vein Endothelial Cells		
Isotype:	Mouse (BALB/c) IgG1, ĸ		
Reactivity:	QC Testing: Human		
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.		

#### Description

The 266 monoclonal antibody specifically binds to CD105. CD105 presents an integral membrane homodimer protein with subunits of 95 kDa found on vascular endothelial cells and syncytiotrophoblasts of placenta. CD105 is weakly expressed on stromal fibroblasts. It is also expressed on U937 cells, activated macrophages, and mesenchymal stem cells. CD105 is a component of the TGF- $\beta$  receptor system in human umbilical vein endothelial cells and binds TGF- $\beta$ 1 and TGF- $\beta$ 3 with high affinity but does not bind toTGF- $\beta$ 2. Expression of CD105 is increased on activated endothelium in tissues undergoing angiogenesis, such as in tumors, or in cases of wound healing or dermal inflammation.



Flow cytometric analysis of CD105 expression on human U937 cells. U937 cells (ATCC, Cat No. CRL-1593.2) were stained with PerCP-Cy™5.5 Mouse anti-Human CD105 antibody (solid line fluorescence histogram) or a PerCP-Cy™5.5 mlgG1,  $\kappa$  isotype control (Cat. No. 550795; dashed line histogram). Flow cytometric fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of viable cells. Flow cytometry was performed using a BD LSR™ II flow cytometry system.

#### **Preparation and Storage**

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with PerCP-Cy5.5 under optimum conditions, and unconjugated antibody and free PerCP-Cy5.5 were removed. Storage of PerCP-Cy5.5 conjugates in unoptimized diluent is not recommended and may result in loss of signal intensity. Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

#### **Application Notes**

Application		
Flow cytometry	Routinely Tested	

#### Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 ml	(none)
550795	PerCP-Cy <sup>™</sup> 5.5 Mouse IgG1 κ Isotype Control	0.1 mg	MOPC-21

### **Product Notices**

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use  $1 \times 10^{6}$  cells in a 100-µl experimental sample (a test).

2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

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- 3. Please observe the following precautions: Absorption of visible light can significantly alter the energy transfer occurring in any tandem fluorochrome conjugate; therefore, we recommend that special precautions be taken (such as wrapping vials, tubes, or racks in aluminum foil) to prevent exposure of conjugated reagents, including cells stained with those reagents, to room illumination.
- 4. PerCP-Cy5.5–labelled antibodies can be used with FITC- and R-PE–labelled reagents in single-laser flow cytometers with no significant spectral overlap of PerCP-Cy5.5, FITC, and R-PE fluorescence.
- 5. PerCP-Cy5.5 is optimized for use with a single argon ion laser emitting 488-nm light. Because of the broad absorption spectrum of the tandem fluorochrome, extra care must be taken when using dual-laser cytometers, which may directly excite both PerCP and Cy5.5™. We recommend the use of cross-beam compensation during data acquisition or software compensation during data analysis.
- 6. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
- 7. An isotype control should be used at the same concentration as the antibody of interest.
- 8. This product is subject to proprietary rights of Amersham Biosciences Corp. and Carnegie Mellon University and made and sold under license from Amersham Biosciences Corp. This product is licensed for sale only for research. It is not licensed for any other use. If you require a commercial license to use this product and do not have one return this material, unopened to BD Biosciences, 10975 Torreyana Rd, San Diego, CA 92121 and any money paid for the material will be refunded.
- 9. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
- 10. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
- 11. Cy is a trademark of Amersham Biosciences Limited. This conjugated product is sold under license to the following patents: US Patent Nos. 5,486,616; 5,569,587; 5,569,766; 5,627,027.

#### References

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