

## Technical Data Sheet

## Purified Mouse Anti-Human CD105

## Product Information

<b>Material Number:</b>	<b>555690</b>
<b>Alternate Name:</b>	Endoglin; ENG; END; HHT1; ORW; ORW1
<b>Size:</b>	0.1 mg
<b>Concentration:</b>	0.5 mg/ml
<b>Clone:</b>	266
<b>Immunogen:</b>	Human Umbilical Vein Endothelial Cells
<b>Isotype:</b>	Mouse (BALB/c) IgG1, $\kappa$
<b>Reactivity:</b>	QC Testing: Human
<b>Storage Buffer:</b>	Aqueous buffered solution containing $\leq 0.09\%$ 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 to TGF- $\beta$ 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.

## Preparation and Storage

Store undiluted at 4°C.

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

## Application Notes

## Application

Flow cytometry	Routinely Tested
Immunohistochemistry-zinc-fixed	Tested During Development
Immunohistochemistry-frozen	Tested During Development
Immunoprecipitation	Tested During Development

## Suggested Companion Products

Catalog Number	Name	Size	Clone
555746	Purified Mouse IgG1, $\kappa$ Isotype Control	0.1 mg	MOPC-21
555988	FITC Goat Anti-Mouse IgG/IgM	0.5 mg	Polyclonal
554656	Stain Buffer (FBS)	500 mL	(none)

## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
3. 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.
4. Sodium azide is a reversible inhibitor of oxidative metabolism; therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer. Since endotoxin may also affect the results of functional studies, we recommend the NA/LE (No Azide/Low Endotoxin) antibody format, if available, for in vitro and in vivo use.
5. Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.

## References

Gougos A, Letarte M. Identification of a human endothelial cell antigen with monoclonal antibody 44G4 produced against a pre-B leukemic cell line. *J Immunol.* 1988; 141(6):1925-1933. (Biology)  
 Lastres P, Bellon T, Cabañas C, et al. Regulated expression on human macrophages of endoglin, an Arg-Gly-Asp-containing surface antigen. *Eur J Immunol.* 1992; 22(2):393-397. (Biology)  
 Wang JM, Kumar S, Pye D, van Agthoven AJ, Krupinski J, Hunter RD. A monoclonal antibody detects heterogeneity in vascular endothelium of tumours and normal tissues. *Int J Cancer.* 1993; 54(3):363-370. (Biology)  
 Westphal JR, Willems HW, Schalkwijk CJ, Ruiter DJ, de Waal RM. A new 180-kDa dermal endothelial cell activation antigen: in vitro and in situ characteristics. *J Invest Dermatol.* 1993; 100(1):27-34. (Biology)

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