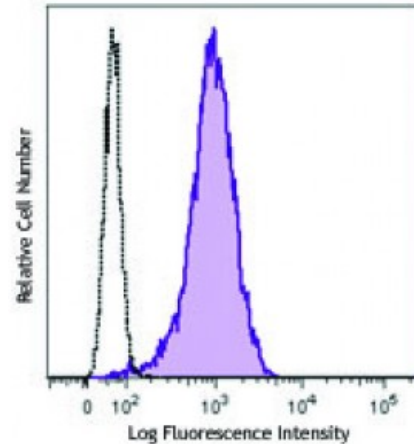


**Brilliant Violet 421™ anti-human CD105**

**Catalog # / Size:** 2216095 / 25 tests  
**Clone:** 43A3  
**Isotype:** Mouse IgG1,  $\kappa$   
**Immunogen:** L-cells transfected with human CD105  
**Reactivity:** Human  
**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.  
**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).  
**Concentration:** Lot-specific



Human leukemic monocyte cell line THP-1 was stained with CD105 (clone 43A3) Brilliant Violet 421™ (filled histogram) or mouse IgG1,  $\kappa$  Brilliant Violet 421™ isotype control (open histogram).

**Applications:**

**Applications:** Flow Cytometry  
**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is  $\leq 5$  microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

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**Application References:**  
1. Bühring HJ, *et al.* 1991. *Leukemia* 5:841.  
2. Vogel W, *et al.* 2002. *Haematologica* 88:126.  
3. Brandau S, *et al.* 2014. *PLoS One*. 9:106903. [PubMed](#)

**Description:** CD105 is also known as Endoglin. It is a type I integral membrane homodimer protein with subunits of 90 kD found on vascular endothelial cells and syncytiotrophoblasts of placenta. CD105 is weakly expressed on stromal fibroblasts. It is also expressed on activated monocytes and tissue macrophages. 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. CD105 is a component of the TGF- $\beta$  receptor system in human

umbilical vein endothelial cells and binds TGF- $\beta$ 1 and  $\beta$ 3 with high affinity but does not bind to TGF- $\beta$ 2.

**Antigen  
References:**

1. Mason D, *et al.* Eds. 2002. Leucocyte Typing VII. Oxford University Press. New York.
2. Pierelli L, *et al.* 2001. *Leuk. Lymphoma* 42:1195.