

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

# **Product datasheet for DP3517S**

## **CD105 (ENG) Rabbit Polyclonal Antibody**

## **Product data:**

| Product Type:                 | Primary Antibodies   |
|-------------------------------|--|
| Applications:                 | ELISA, FC, IF, IHC, WB   |
| Recommended Dilution:         | <b>ELISA</b> (1-15 μg/ml).<br><b>Western blot</b> (1-5 μg/ml with the appropriate secondary reagents).<br><b>FACS analysis and cell sorting</b> (2-5 μg/ml together with the appropriate secondary reagents).<br><b>Immunofluorescence/Immunohistochemistry</b> (1-5 μg/ml). |
| Reactivity:                   | Human  |
| Host:                         | Rabbit   |
| Clonality:                    | Polyclonal   |
| Immunogen:                    | Recombinant Human soluble CD105/Endoglin (aa. 22 (Glu) to 586 (Leu)) derived from Insect<br>Cells (CatNo DA3523X).   |
| Specificity:                  | This antibody detects CD105.   |
| Formulation:                  | PBS, pH 7.4 without preservatives<br>State: Purified<br>State: Lyophilized purified Ig fraction  |
| <b>Reconstitution Method:</b> | Restore in sterile water to a concentration of 0.1-1.0 mg/ml   |
| Purification:                 | Protein A Chromatography   |
| Conjugation:                  | Unconjugated   |
| Storage:                      | Prior to reconstitution store at 2-8°C.<br>Following reconstitution store undiluted at 2-8°C for one month<br>or (in aliquots) at -20°C for longer.<br>Avoid repeated freezing and thawing.  |
| Stability:                    | Shelf life: one year from despatch.  |
| Gene Name:                    | endoglin   |
| Database Link:                | <u>Entrez Gene 2022 Human</u><br><u>P17813</u>   |



#### **CD105 (ENG) Rabbit Polyclonal Antibody – DP3517S**

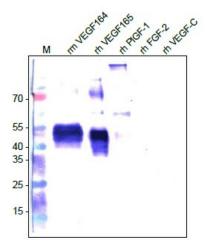
#### Background:

Endoglin, also known as CD105, is a Type I integral membrane glycoprotein with a large, disulfide-linked, extracellular region and a short, constitutively phosphorylated, cytoplasmic tail. Two splice variants of human Endoglin, the S-Endoglin and L-Endoglin that differ in the length of their cytoplasmic tails have been identified. Endoglin is highly expressed on vascular endothelial cells, chondrocytes, and syncytiotrophoblasts of term placenta. It is also found on activated monocytes, bone marrow pro-erythroblasts, and leukemic cells of lymphoid and myeloid lineages. Human and mouse Endoglin share approximately 70% and 97 % amino acid sequence identity in their extracellular and intracellular domains, respectively. It has clearly been shown that CD105/Endoglin is required for angiogenesis and it plays a key role in heart development. Mutations in human Endoglin or ALK-1 (another type I serine/threonine receptor) lead to the vascular disorder hereditary hemorrhagic telangiectasia (HHT). Mice heterozygous for Endoglin have been developed as disease models for HHT. Endoglin has been shown to be a powerful marker of neovascularization. It is also useful as a functional marker that defines long-term repopulating hematopoietic stem cells.

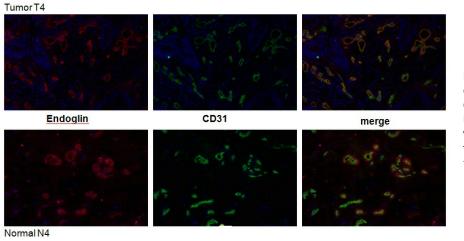
Synonyms:

ENG, END, HHT1, ORW, ORW1

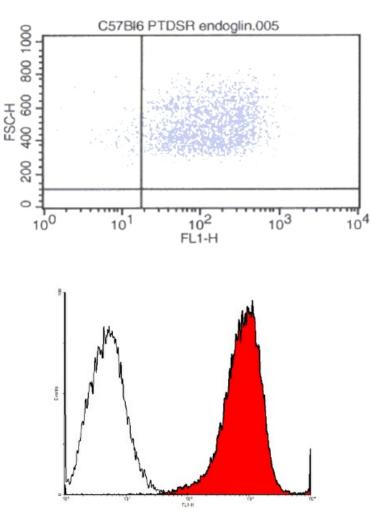
### **Product images:**



Western analysis of recombinant human ( [DA3523]) and human ([DA3522]) soluble CD105 using an anti-human CD105 antibody ( [DP3517]/) directed against recombinant human and mouse soluble CD105 produced in insect cells. The SDS-PAGE was run under reducing conditions. There is a strong cross reaction between human and mouse visible.

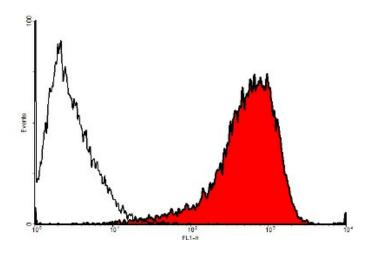


Double staining of human colon and colon carcinoma tissue with Endoglin ([DP3517]) / CD31. The experiments were perfomed by Dr. Ulrike Fiedler and Stefanie Koidel, Dept. of Vascular Biology and Angiogenesis Research, Tumor Biology Center, Breisacher Str. 117, D-79106 Freiburg, Germany



FACS analysis with antibodies against murine CD105/Endoglin in C57B16 cells

FACS analysis with primary human dermal lymphatic endothelial cells (HDLEC).



FACS analysis with primary human umbilical vein endothelial cells (HUVEC).