Enable Innovation DATA SHEET

## Rabbit Anti-CD105 (Endoglin/TGF-B Receptor) [EPR19911]: RM0281, RM0281RTU7

**Intended Use:** For Research Use Only

**Description:** CD105/Endoglin is a Type I membrane glycoprotein located on cell surfaces and is part of the TGF-beta receptor complex. This protein has been found on endothelial cells, activated macrophages, fibroblasts, and smooth-muscle cells. Endoglin has a role in the development of the cardiovascular system and in vascular remodeling. Its expression is regulated during heart development. CD105 is highly expressed in endothelial cells during tumor angiogenesis and inflammation, with weak or negative expression in vascular endothelium of normal tissues. Angiogenesis is a promising prognostic marker in a variety of tumors. Endoglin is a more specific and sensitive marker for tumor angiogenesis than CD31 or CD34, as it labels only newly-formed blood vessels and may serve as a prognostic marker for Prostate Adenocarcinoma, and cancers of the lung, stomach, breast, and brain.

**Specifications:** 

Clone: EPR19911 equivalent to EP274

Source: Rabbit
Isotype: IgG
Reactivity: Human
Localization: Cytoplasm

Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)

Storage: Store at 2°-8°C

Applications: IHC

Package:

| Description                                | Catalog No. | Size |  |
|--|-------------|------|--|
| CD105/Endoglin/TGF-β Receptor Concentrated | RM0281      | 1 ml |  |
| CD105/Endoglin/TGF-β Receptor Prediluted   | RM0281RTU7  | 7 ml |  |

## **IHC Procedure\*:**

Positive Control Tissue: Normal vascular tissue, liver, tonsil

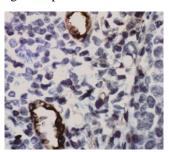
Concentrated Dilution: 50-200

Pretreatment: EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using

water bath at 95°-99°C

Incubation Time and Temp: 30-60 minutes @ RT

Detection: Refer to the detection system manual \* Result should be confirmed by an established diagnostic procedure.



FFPE human tonsil stained with anti-CD105 using DAB

## **References:**

- 1. 5-FU resistant EMT-like pancreatic cancer cells are hypersensitive to photochemical internalization of the novel endoglin-targeting immunotoxin CD105-saporin. Lund K, et al. J Exp Clin Cancer Res 36:187, 2017.
- 2. Endoglin Is Essential for the Maintenance of Self-Renewal and Chemoresistance in Renal Cancer Stem Cells. Hu J, et al. Stem Cell Reports 9:464-477, 2017.
- 3. Co-evolution of tumor-associated macrophages and tumor neo-vessels during cervical cancer invasion. Jiang S, et al. Oncol Lett 12:2625-2631, 2016.

Doc. 100-RM0281

Rev. B

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