



## Monoclonal Antibody to **CD105 (Anti-Endoglin antibody)**

### *Technical Data Sheet*

#### Reagent Category

Monoclonal primary antibody to CD105

PRODUCT# IMI13261E (Ready-To-Use)

PRODUCT# IMI13252E (Concentrate)

#### Antibody Formats Supplied

5 ml of anti CD105 antibody, Ready-To-Use

0.2 ml of anti CD105, Concentrate

**SOURCE:** Cultured supernatant

**CLONE:** 8E11

**IMMUNOGLOBULIN ISOTYPE:** IgM

**POSITIVE CONTROL TISSUE:** Normal tonsil

#### **REACTIVITY**

This antibody recognizes and reacts with endoglin, which is an endothelial homodimeric integral membrane glycoprotein of 95 kD subunits known as CD105. CD105 is known to be a component of TGF-beta receptor system and can bind to TGF- $\beta$ 1 and TGF- $\beta$ 3 with high affinity, but does not bind to TGF- $\beta$ 2. CD105 is expressed by a vascular endothelial cells and syncytiotrophoblasts of placenta, it is also weakly expressed by stromal fibroblasts and activated macrophages. CD105 expression is increased on activated endothelium in tissues undergoing angiogenesis, e.g. Tumors, wound healing cases and in dermal inflammation. This antibody is suitable for use on routinely fixed paraffin embedded and frozen sections. This antibody is compatible with formalin fixative as well as most commonly used histological fixatives.

**STAINING PATTERN:** Membrane staining of endothelial cells.

#### **Antibody FORMATS, DILUTIONS and INCUBATIONS**

Affinity purified monoclonal anti human CD105 antibody is provided in phosphate buffered saline pH 7.4 containing bovine serum albumin (BSA) and 0.1% sodium azide.

5 ml of pre-diluted, Ready-to-Use, **Do not dilute.** Incubate for 30 minutes to 1 hour.

0.2 ml of concentrate; the starting dilution for this antibody is 1:20-1:40 (dilution range indicates the preferred time of incubation from 30 minute to one hour). The optimal incubation time for the working titer should be determined by the end use.

The above dilutions and incubation times were derived by the use of Innovex STAT-Q and HISTO-STAT detection systems and the use of Enhancing wash buffer (see special usage guidance below). For less sensitive detection systems these dilution factors may vary and they should be determined by the end user for specific detection system employed.

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### **SPECIAL USAGE GUIDANCE**

**The use of Innovex signal-enhancing Wash Buffers** (Item#: IMI00396E for Immuno-Peroxidase staining and Item#: IMI00596E for Immuno-Alkaline-phosphatase) in place of PBS or Tris buffer for the rinsing steps in Between the incubation steps is **highly recommended for this antibody**. The use of Innovex Signal Enhancing Wash buffers **amplifies staining signal, eliminates the need for enzyme digestion pre treatment, heat application** (retrieval procedure) **and shortens the incubation time for the primaries antibodies without addition of any extra steps to immunostaining procedures.**

### **APPLICATIONS**

This antibody is intended for use in immunolocalization of CD105 by a variety of immunoassays such as Immunocytochemistry, fluorescent labeling, ELISA, Immunoblotting and dot blotting. In immunocytochemistry, this antibody can be used in staining routinely fixed paraffin embedded or frozen histological sections of human tissues for the purpose of quantitative localization of CD105. This antibody can also be used for quantitative flow cytometric assays in the indirect method.

### **SPECIES REACTIVITY**

This antibody reactivity with human tissues has been substantiated, other species reactivity may be characterized by the end user.

### **STORAGE CONDITIONS**

Store in refrigerator at 2-8°C through expiration date noted on the vial.

### **IMPORTANT NOTE:**

**The interpretation of test results is the sole responsibility of the end user.**

***FOR IN VITRO RESEARCH USE ONLY***