

#### Product datasheet for DM3612P

# OriGene Technologies, Inc.

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## **Eng Rat Monoclonal Antibody [Clone ID: MJ7/18]**

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: MJ7/18

**Applications:** FC, IF, IHC, IP, WB

Recommended Dilution: Western Analysis: 1-5 µg/ml.

Immunoprecipitation: 1-4 µg/ml.

**FACS analysis:** 3-20 µg/ml.

**Immunofluorescence/Immunohistochemistry:** It was reported for use of staining of Frozen

Sections.

Reactivity: Mouse

Host: Rat IgG2a

Clonality: Monoclonal

Immunogen: Inflamed Mouse skin.

**Specificity:** This *MJ7/18* Monoclonal antibody reacts with the CD105 molecule, also known as Endoglin.

Formulation: PBS, pH 7.4

State: Purified

State: Lyophilized purified IgG fraction of the Culture Supernatant

**Reconstitution Method:** Restore in sterile water to a concentration of 0.1-1.0 mg/ml

**Purification:** Protein G Chromatography

Conjugation: Unconjugated

**Storage:** Prior to reconstitution store at 2-8°C for one month or at -20°C for longer.

Following reconstitution store undiluted at 2-8°C for one month

or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**Gene Name:** endoglin

Database Link: Entrez Gene 13805 Mouse

Q63961





#### Background:

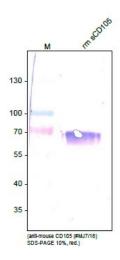
Mouse Endoglin is a disulfide-linked homodimeric protein. Based on N-terminal sequence analysis the primary structure of recombinant mature Endoglin starts at Glu 26. Endoglin has a calculated monomeric molecular mass of 61 kDa but as a result of glycosylation, migrates at approximately 70 - 75 kDa under reducing conditions in SDS-PAGE. 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. Endoglin binds TGF-ß1 and TGF-ß3 but not TGF-ß2 efficiently by associating with TGF-ß type II receptor (TßRII).

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:

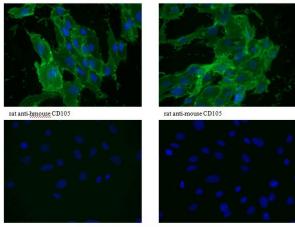
ENG, END, HHT1, ORW, ORW1

## **Product images:**



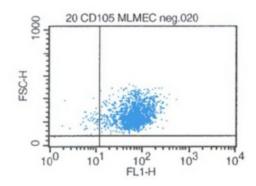
Western analysis of recombinant mouse soluble CD105/Endoglin using a rat anti-mouse CD105 #M|7/18 antibody.



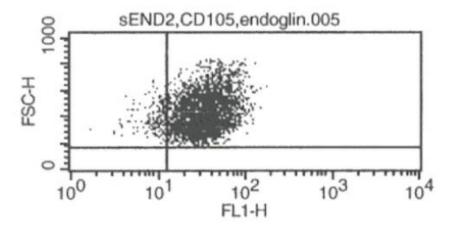


Control (goat anti-rat IgG ALEXA Flour 488; 1:400)

Immunofluorescence staining of CD105 in mouse primary endothelial cells (SnoMec) with monoclonal rat anti-mouse CD105 (Clone MJ7/18) (upper panel).Control with goat anti-rat ALEXA Flour 488 (lower panel).



FACS analysis with Mouse lung microvascular endothelial cells (MLMEC).



FACS analysis with sEND2 cells. As secondary antibody anti-rat IgG-FITC was used.