

## Product datasheet for **DM3612B**

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

#### Product data:

|                        |   |
|------------------------|---|
| Product Type:          | Primary Antibodies  |
| Clone Name:            | MJ7/18  |
| Applications:          | FC, IHC, IP, WB   |
| Recommended Dilution:  | <b>ELISA.</b><br><b>Western Blot:</b> 2-5 µg/ml.<br><b>Immuoprecipitation:</b> 1-2 µg.<br><b>FACS analysis:</b> 3-20 µg/ml.<br><b>Immunohistochemistry on Frozen Sections.</b>  |
| Reactivity:            | Mouse   |
| Host:                  | Rat   |
| Isotype:               | IgG2a   |
| Clonality:             | Monoclonal  |
| Immunogen:             | Murine stromal cell line  |
| Specificity:           | This <i>MJ7/18</i> Monoclonal antibody reacts with the CD105 molecule, also known as Endoglin.  |
| Formulation:           | PBS<br>Label: Biotin<br>State: Lyophilized purified IgG fraction of the Culture Supernatant<br>Stabilizer: 50xBSA<br>Preservative: 0.02% Sodium Azide   |
| Reconstitution Method: | Restore in sterile water to a concentration of 0.1-1.0 mg/ml.   |
| Purification:          | Protein G Chromatography  |
| Conjugation:           | Biotin  |
| Storage:               | Store lyophilized at 2-8°C for 6 months or at -20°C long term.<br>After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term.<br>Avoid repeated freezing and thawing. |
| Stability:             | Shelf life: one year from despatch.   |
| Gene Name:             | endoglin  |



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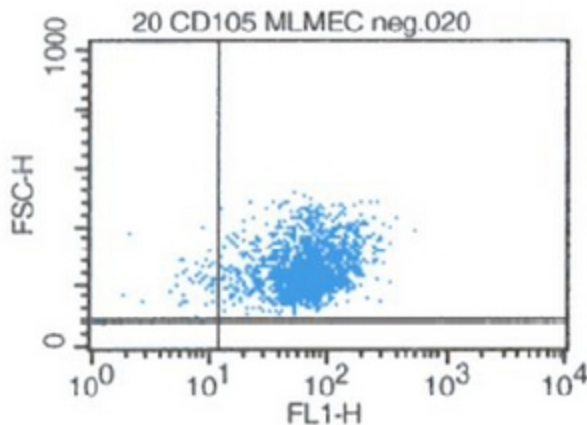
Database Link: [Entrez Gene 13805 Mouse Q63961](#)

**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- $\beta$ 1 and TGF- $\beta$ 3 but not TGF- $\beta$ 2 efficiently by associating with TGF- $\beta$  type II receptor (T $\beta$ RII).

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:**



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