## anti-porcine / anti-human CD105

## Monoclonal Antibody MEM-229 to CD105 (porcine/human)

Cat-No: 26271051

100 µg in 100 µl

Clone: MEM-229

**Specificity:** The antibody MEM-229 recognizes CD105 (Endoglin), a 180 kDa type I integral membrane homodimer glycoprotein expressed on vascular endothelial cells (small and large vessels), activated monocytes and tissue macrophages, stromal cells of certain tissues including bone marrow, pre-B lymphocytes in fetal marrow and erythroid precursors in fetal and adult bone marrow; it is also present on syncytiotrophoblast on placenta throughout pregnancy.

Isotype subclass: Mouse IgG2a

Species Reactivity: Human, Porcine

Negative Species: Canine (Dog), Equine (Horse)

Form: Purified from ascites by protein-A affinity chromatography.

**Purity:** > 95% (by SDS-PAGE)

Physical state: Liquid

Buffer/Additives/Preservative: PBS containing 0.09% sodium azide (pH 7.2).

**Expiration date:** The reagent is stable until the expiry date stated on the vial label.

Storage conditions: Store at 4 °C. For long-term storage aliquot and store at -20°C. Avoid freeze/thaw cycles.

**Application:** Flow Cytometry and Western Blotting: non reducing conditions

**Background:** CD105 (Endoglin) is a homodimeric transmembrane glycoprotein serving in presence of TGF $\beta$ R-2 as a receptor for TGF $\beta$ -1 and TGF $\beta$ -3. CD105 is highly expressed on endothelial cells and promotes angiogenesis during wound healing, infarcts and in a wide range of tumours and its gene expression is stimulated by hypoxia. CD105 prevents apoptosis in hypoxic endothelial cells and also antagonises the inhibitory effects of TGF $\beta$ -1 on vascular endothelial cell growth and migration. Normal cellular levels of CD105 are required for formation of new blood vessels.

## **References:**

- 1. Li C and others: J Cell Sci. 2003 Jul 1;116(Pt 13):2677-85.
- 2. Guo B and others: Anticancer Res. 2004 May-Jun;24(3a):1337-45.
- 3. Warrington K and others: Anticancer Res. 2005 May-Jun;25(3B):1851-64.
- 4. Piao M, Tokunaga O: J Atheroscler Thromb. 2006 Apr;13(2):82-9.

**Warning:** Sodium azide is harmful if swallowed (R22). Keep out of reach of children (S2). Keep away from food, drink and animal feedingstuff (S13). Wear suitable protective clothing (S36). If swallowed, seek medical advice immediately and show this container or label (S46). Contact with acids liberates very toxic gas (R32). Azide compounds should be flushed with large volumes of water during disposal to avoid deposits in lead or copper plumbing where explosive conditions can develop.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

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