anti-human CD105 Dyomics 647 -conjugated

Dy647-conjugated monoclonal antibody MEM-226 to human CD105

Cat-No: **21271058** 500 μl

Clone: MEM-226

Specificity: The antibody MEM-226 reacts with CD105 (Endoglin), a 180 kDa type I homodimerizing membrane 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

Immunogen: Recombinant Vaccinia virus containing the human CD105 cDNA.

Form: The purified antibody is conjugated with Dyomics 647 (DY647) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.

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

Physical state: Liquid

Buffer/Additives/Preservative: PBS containing 1% BSA and 0.09% sodium azide (pH 7.2)

Storage conditions: Store at 4 °C. Do not freeze. Avoid prolonged exposure to light.

Application: The reagent is designed for flow cytometry analysis of human blood cells.

References:

- *Zhu Y and others:. Stroke. 2003 Oct;34(10):2483-8.
- *Li C and others: J Cell Sci. 2003 Jul 1;116(Pt 13):2677-85.
- *Guo B and others: Anticancer Res. 2004 May-Jun;24(3a):1337-45.
- *Warrington K and others:. Anticancer Res. 2005 May-Jun;25(3B):1851-64.
- *Piao M, Tokunaga O:. J Atheroscler Thromb. 2006 Apr;13(2):82-9.

Background: CD105 (Endoglin) is a homodimeric transmembrane glycoprotein serving in presence of TGF β R-2 as a receptor for TGF β -1 and TGF β -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 β -1 on vascular endothelial cell growth and migration. Normal cellular levels of CD105 are required for formation of new blood vessels.

Warning: Sodium azide is harmful if swallowed (R22). Keep out of reach of children (S2). Keep away from food, drink and animal feeding stuff (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.

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