

Monoclonal Antibody to CD15 - PE

Alternate names: Lacto-N-Fucopentaose III, Lewis X, SSEA1, Stage-Specific Embryonic Antigen, X-Hapten

Catalog No.: SM3010R
Quantity: 100 Tests

Background: CD15 (Lewis X, Le(x); stage specific embryonic antigen-1, SSEA-1) is a trisacharide

determinant (3-fucosyl-N-acetyllactosamine) expressed on several glycolipids, glycoproteins and proteoglycans of various cell types, e.g. granulocytes, mast cells,

monocytes, macrophages, cells of gastric mucosa, nervous system or various tumour cells. There are several variants of Lewis x, such as sialyl-Lewis x or sulphated Lewis x. Cells with

high surface expression of Le(x) antigen exhibit strong self-aggregation, based on calcium-dependent Le(x)-Le(x) interaction. This process is involved for example in embryo compaction or in autoaggregation of teratocarcinoma cells. Sialyl-Le(x) and its isomer

sialyl-Le(a) are ligands of selectins. CD15 expression has been extensively used to confirm

diagnosis of Hodgkin's disease.

Host / Isotype: Mouse / IgM Clone: MEM-158

Immunogen: Human granulocytes.

Format: State: Liquid purified IgG fraction.

Purification: Size-exclusion chromatography.

Buffer System: PBS containing 15 mM sodium azide as preservative and 0.2% (w/v)

high-grade BSA (Protease free) as stabilizer.

Label: PE – Conjugated with R-Phycoerythrin under optimum conditions

Applications: Suitable for Flow Cytometry analysis of human blood cells using 20 µl reagent / 100 µl of

whole blood or 10e6 cells in a suspension.

The content of a vial (2 ml) is sufficient for 100 tests.

Other applications not tested. Optimal dilutions are dependent on conditions and should

be determined by the user.

Specificity: The antibody MEM-158 reacts with CD15, a cell membrane molecule

3-fucosyl-N-acetyllactosamine (3-FAL) strongly expressed on granulocytes, monocytes, macrophages, mast cells; it is also present on Langerhans cells and some myeloid

precursors cells.

Negative Species: Porcine.

Storage: Store the antibody in the dark at 2-8°C.

Do Not Freeze!

Avoid prolonged exposure to light. Shelf life: one year from despatch.



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- General References: 1. Benharroch D, Dima E, Levy A, Ohana-Malka O, Ariad S, Prinsloo I, Mejirovsky E, Sacks M, Gopas J: Differential expression of sialyl and non-sialyl-CD15 antigens on Hodgkin-Reed-Sternberg cells: significance in Hodgkin's disease. Leuk Lymphoma. 2000 Sep;39(1-2):185-94.
 - 2. Hakomori S: Le(X) and related structures as adhesion molecules. Histochem J. 1992 Nov;24(11):771-6.
 - 3. Li C, Wong P, Pan T, Xiao F, Yin S, Chang B, Kang SC, Ironside J, Sy MS: Normal cellular prion protein is a ligand of selectins: binding requires Le(X) but is inhibited by sLe(X). Biochem J. 2007 Sep 1;406(2):333-41.
 - 4. Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).