

1P-213-T025

Monoclonal Antibody to CD15 Phycoerythrin (PE) conjugated (25 tests)

Clone:	MEM-158
Isotype:	Mouse IgM
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. HLDA VI; WS Code AS A053
Immunogen:	Human granulocytes
Species Reactivity:	Human
Negative Species:	Porcine
Preparation:	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Storage Buffer:	The reagent is provided in phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent.
Storage / Stability:	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label. Short-term exposure to room temperature should not affect the quality of the reagent. However, if reagent is stored under any conditions other than those specified, the conditions must be verified by the user.
Usage:	The reagent is designed for Flow Cytometry analysis of human blood cells using 20 µl reagent / 100 µl of whole blood or 10 ⁶ cells in a suspension. The content of a vial (0.5 ml) is sufficient for 25 tests.
Expiration:	See vial label
Lot Number:	See vial label
Background:	CD15 (Lewis X, Le(x); stage specific embryonic antigen-1, SSEA-1) is a trisaccharide 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.

For laboratory research only, not for drug, diagnostic or other use.



Antibodies

References:

- *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.
- *Hakomori S: Le(X) and related structures as adhesion molecules. *Histochem J*. 1992 Nov;24(11):771-6.
- *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.
- *Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).

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