TECHNICAL DATA SHEET

CyFlow™ CD15 Pacific Blue™
Anti-Hu; Clone MEM-158

REF **BS939780**

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD15
Alternative Names	Lewis X
Clone	MEM-158
Clonality	monoclonal
Format	Pacific Blue™
Host / Isotype	Mouse / IgM
Species Reactivity	Human
Negative Species Reactivity	Pig | Cow | Sheep
Quantity	100 tests
Immunogen	Human granulocytes

Specificity

The antibody MEM-158 recognizes CD15 antigen, 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.

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Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 4 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing Tris buffered saline (TBS) solution, pH ≈8.0, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

CD15 (Le(x); Lewis x or SSEA-1; stage specific embryonic antigen-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 tumor 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.

References

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- 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. < PMID: 10975398 >
- 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. < PMID: 17497959 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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