EXBIO Antibodies

PRODUCT DATA SHEET

1D-353-T100

Monoclonal Antibody to CD71
Dyomics 647 (DY647) conjugated (100 tests)

Clone: MEM-189

Isotype: Mouse IgG1

Specificity: The antibody MEM-189 reacts with CD71 antigen (transferrin receptor), a 95 kDa type II homodimeric transmembrane glycoprotein expressed on activated B and lymphocytes, macrophages and erythroid precursors; it is lost on resting blood leukocytes.
The antibody MEM-189 does not block binding of transferrin to the receptor.
HLDA VI; WS Code NL N-L025

Immunogen: KG1 human acute myelogenous leukaemia cell line

Species Reactivity: Human

Preparation: 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.

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 (2 ml) is sufficient for 100 tests.

Expiration: See vial label

Lot Number: See vial label

Background: CD71 (transferrin receptor) is a type II transmembrane glycoprotein expressed as homodimer in erythroid blood cell line and in activated leukocytes. Upon binding of holotransferrin (complex of transferrin and iron ions), CD71 is internalized by clathrin-mediated endocytosis. Acidification of endosomes by vesicular membrane proton pumps leads to dissociation of iron ions, whereas transferrin (apotransferrin) remains associated with CD71 and recycles to the cell surface, where it is released upon exposure to normal pH. CD71 is also involved in uptake of non-transferrin bound iron.

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

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References:

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*Taketani S: Aquisition, mobilization and utilization of cellular iron and heme: endless findings and growing evidence of tight regulation. Tohoku J Exp Med. 2005 Apr;205(4):297-318.
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