

1B-235-C025

Monoclonal Antibody to CD71 Biotin conjugated (0.025 mg)

Clone: MEM-75

Isotype: Mouse IgG1

Specificity: The antibody MEM-75 reacts with CD71 antigen (transferrin receptor), a 95 kDa

type II homodimeric transmembrane glycoprotein expressed on activated B and T lymphocytes, macrophages and erythroid precursors; it is lost on resting blood

leukocytes.

The antibody MEM-75 does not block binding of transferrin to the receptor.

HLDA IV; WS Code A 45 HLDA V; WS Code T T-165

Regulatory Status: RUO

Immunogen: NALM-6 human pre-B cell line

Species Reactivity: Human

Preparation: The purified antibody is conjugated with Biotin-LC-NHS under optimum conditions.

The reagent is free of unconjugated biotin.

Concentration: 1 mg/ml

Storage Buffer: Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4

Storage / Stability: Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial

label.

Usage: Biotinylated antibody is designed for indirect immunofluorescence analysis by Flow

Cytometry.

Suggested working dilution is 1:200. Indicated dilution is recommended starting point for use of this product. Working concentrations should be determined by the

investigator.

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.



PRODUCT DATA SHEET

References:

*Rouault TA: How mammals acquire and distribute iron needed for oxygen-based metabolism. PLoS Biol. 2003 Dec;1(3):E79.

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*Graham RM, Chua AC, Herbison CE, Olynyk JK, Trinder D: Liver iron transport. World J Gastroenterol. 2007 Sep 21;13(35):4725-36.

*Graham RM, Reutens GM, Herbison CE, Delima RD, Chua AC, Olynyk JK, Trinder D: Transferrin receptor 2 mediates uptake of transferrin-bound and non-transferrin-bound iron. J Hepatol. 2008 Feb;48(2):327-34.

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