

Datasheet for ABIN94224

**anti-Transferrin Receptor antibody (PE)**

3 Images

1 Publication

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## Overview

Quantity:	100 tests
Target:	Transferrin Receptor (TFRC)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Transferrin Receptor antibody is conjugated to PE
Application:	Flow Cytometry (FACS)

## Product Details

Immunogen:	NALM-6 human pre-B cell line
Clone:	MEM-75
Isotype:	IgG1
Specificity:	The antibody MEM-75 reacts with an extracellular epitope of 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.
Cross-Reactivity (Details):	Human
Purification:	Purified antibody is conjugated with R-phycoerythrin (PE) under optimum conditions. Unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

## Target Details

Target:	Transferrin Receptor (TFRC)
Alternative Name:	CD71 ( <a href="#">TFRC Products</a> )
Background:	Transferrin receptor,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.,TfR1, TfR, TR, Trfr, T9, p90, TFRC
Gene ID:	7037
UniProt:	<a href="#">P02786</a>
Pathways:	<a href="#">Transition Metal Ion Homeostasis</a>

## Application Details

Application Notes:	Flow cytometry: The reagent is designed for analysis of human blood cells using 20 µL reagent / 100 µL of whole blood or 10 <sup>6</sup> cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests.
Comment:	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.
Restrictions:	For Research Use only

## Handling

Reconstitution:	No reconstitution is necessary.
Buffer:	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	<b>Do not freeze.</b> Avoid prolonged exposure to light.
Storage:	4 °C

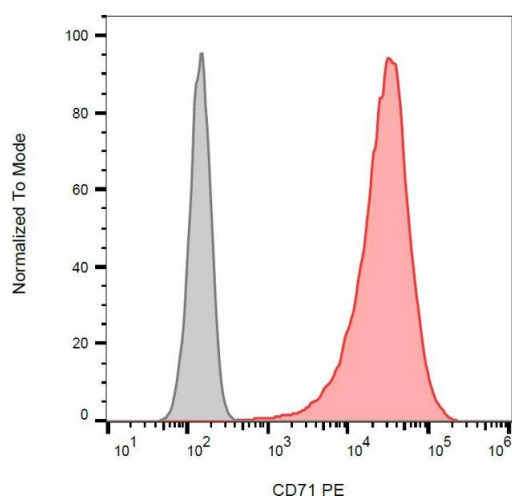
## Handling

Storage Comment: Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

## Publications

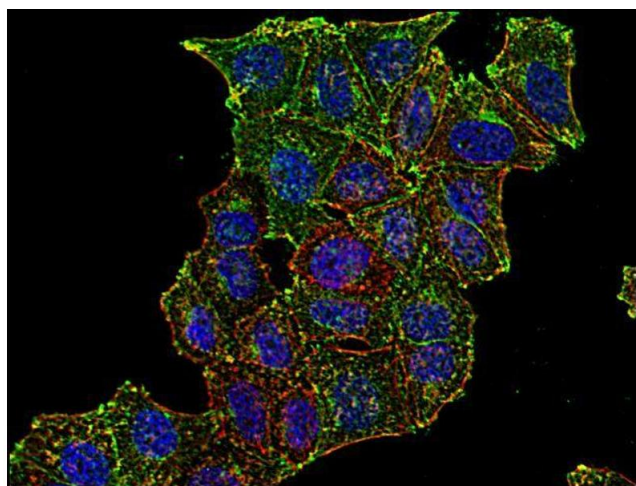
Product cited in: Beck, Balogh, Kis, Izsépi, Cervenak, László, Bíró, Liliom, Mocsár, Vámosi, Füst, Matko: "New cholesterol-specific antibodies remodel HIV-1 target cells' surface and inhibit their in vitro virus production." in: **Journal of lipid research**, Vol. 51, Issue 2, pp. 286-96, (2010) ([PubMed](#)).

## Images



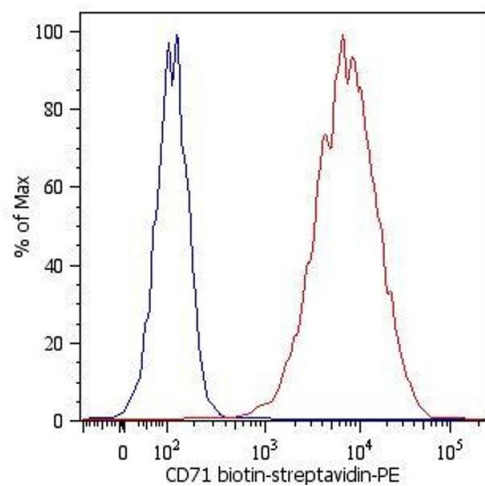
### Flow Cytometry

**Image 1.** Flow cytometry analysis (surface staining) of CD71 in K562 cells (red) and human lymphocytes (negative, grey) using anti-CD71 (MEM-75) PE.



### Immunofluorescence

**Image 2.** Immunofluorescence staining of CD71 in human HeLa cell line using anti-CD71 (; green). Actin cytoskeleton decorated by phalloidin (red) and cell nuclei stained with DAPI (blue)



### Flow Cytometry

**Image 3.** Surface staining of NALM-6 human peripheral blood pre-B cell leukemia cell line with anti-CD71 (MEM-75) biotin; detection by Streptavidin-PE . Total viable cells were used for analysis.