

Product datasheet

PE Anti-Transferrin Receptor antibody [MEM-75] ab18242

[1 References](#) [1 Image](#)

Overview

Product name	PE Anti-Transferrin Receptor antibody [MEM-75]
Description	PE Mouse monoclonal [MEM-75] to Transferrin Receptor
Host species	Mouse
Conjugation	PE. Ex: 488nm, Em: 575nm
Specificity	CD71 antigen (transferrin receptor). This antibody does not block binding of transferrin to the receptor.
Tested applications	Suitable for: Flow Cyt
Species reactivity	Reacts with: Human
Immunogen	Tissue, cells or virus corresponding to Human Transferrin Receptor. NALM-6 human pre-B cell line
Positive control	Human blood cells.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C.
Storage buffer	pH: 7.40 Preservative: 0.097% Sodium azide Constituents: PBS, BSA
	BSA is IgG and protease free
Purification notes	The conjugate was purified by size exclusion chromatography.

Clonality	Monoclonal
Clone number	MEM-75
Isotype	IgG1

Applications

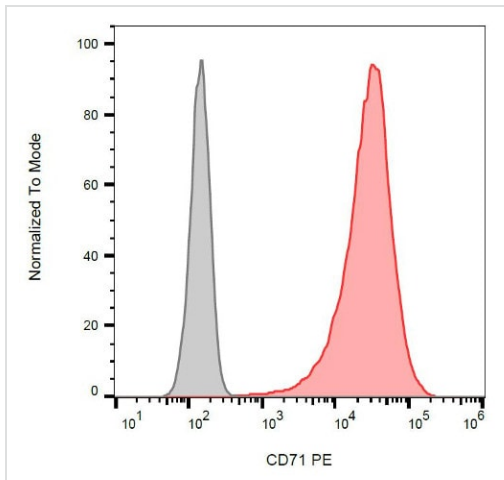
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab18242 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		Use 10µl for 10 ⁶ cells. or 10 ul per 100 ul of whole blood. ab01257 Mouse monoclonal IgG1 is suitable for use as an

Target

Function	Cellular uptake of iron occurs via receptor-mediated endocytosis of ligand-occupied transferrin receptor into specialized endosomes. Endosomal acidification leads to iron release. The apotransferrin-receptor complex is then recycled to the cell surface with a return to neutral pH and the concomitant loss of affinity of apotransferrin for its receptor. Transferrin receptor is necessary for development of erythrocytes and the nervous system (By similarity). A second ligand, the hereditary hemochromatosis protein HFE, competes for binding with transferrin for an overlapping C-terminal binding site. Positively regulates T and B cell proliferation through iron uptake (PubMed:26642240). (Microbial infection) Acts as a receptor for new-world arenaviruses: Guanarito, Junin and Machupo virus.
Involvement in disease	Immunodeficiency 46
Sequence similarities	Belongs to the peptidase M28 family. M28B subfamily. Contains 1 PA (protease associated) domain.
Post-translational modifications	N- and O-glycosylated, phosphorylated and palmitoylated. The serum form is only glycosylated. Proteolytically cleaved on Arg-100 to produce the soluble serum form (sTfR). Palmitoylated on both Cys-62 and Cys-67. Cys-62 seems to be the major site of palmitoylation.
Cellular localization	Secreted and Cell membrane. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Images



Flow Cytometry - PE Anti-Transferrin Receptor antibody [MEM-75] (ab18242)

Flow Cytometry analysis of CD71 in K562 cells (red) and human lymphocytes (negative, grey) labeling Transferrin Receptor with Anti-Transferrin Receptor antibody [MEM-75] (Phycoerythrin) (ab18242).

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