abcam

Product datasheet

Anti-Transferrin Receptor antibody [MEM-189] ab1086

★★★★★ 4 Abreviews 31 References 1 Image

Overview

Product name Anti-Transferrin Receptor antibody [MEM-189]

DescriptionMouse monoclonal [MEM-189] to Transferrin Receptor

Host species Mouse

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.

Tested applications Suitable for: Flow Cyt

Unsuitable for: ICC/IF

Species reactivity Reacts with: Human

Immunogen Tissue, cells or virus corresponding to Human Transferrin Receptor. KG1 human acute

myelogenous leukaemia cell line

Positive control Flow Cyt: K562 cells.

General notesThe 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.

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

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 8.0

Preservative: 0.097% Sodium azide

Constituent: Tris buffer

Purity Protein A purified

Clonality Monoclonal

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Clone number MEM-189

Isotype IgG1

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab1086 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 | *** <u>*</u> | Use a concentration of 2 µg/ml. |

Application notes Is unsuitable for ICC/IF.

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 heditary 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).

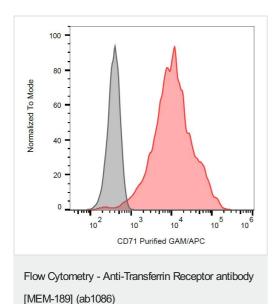
Palmitoylated on both Cys-62 and Cys-67. Cys-62 seems to be the major site of palmitoylation.

Cellular localization

Secreted and Cell membrane. Melanosome. Identified by mass spectrometry in melanosome

fractions from stage I to stage IV.

Images



Flow Cytometry analysis of K562 cells labelling Transferrin with ab1086 at 2 μ g/ml.

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