abcam

Product datasheet

Anti-Transferrin Receptor antibody [MEM-75] ab9179

★★★★★ 1 Abreviews 9 References 4 图像

概述

产品名称 Anti-Transferrin Receptor抗体[MEM-75]

小鼠单**克隆抗体**[MEM-75] to Transferrin Receptor

宿主 Mouse

特异性 Human CD71 (transferrin receptor). This antibody does not block the binding of transferrin to the

receptor.

经测试应用 适用于: Flow Cyt, ICC/IF

种属反应性 与反应: Human

免疫原 Tissue, cells or virus corresponding to Human Transferrin Receptor. Pre-B cell line NALM-6

阳性对照 This antibody gave a positive result in IF in the following Formaldehyde fixed cell line: DU145 and

HeLa

常规说明 This product was changed from ascites to tissue culture supernatant on 24th January 2018.

Please note that the dilutions may need to be adjusted accordingly. If you have any questions,

please do not hesitate to contact our scientific support team.

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.

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

性能

形式 Liquid

存放说明 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.

存储溶液 pH: 8.0

Preservative: 0.097% Sodium azide

Constituent: PBS

纯**度** Protein A purified

纯**化说明** Purified from TCS. Purity >95% by SDS-PAGE.

1

 克隆
 单克隆

 克隆编号
 MEM-75

 骨髓瘤
 unknown

 同种型
 lgG1

 轻链类型
 unknown

应用

The Abpromise guarantee Abpromise™承诺保证使用ab9179于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt		Use 1µg for 10 ⁶ cells. ab170190 - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
ICC/IF	★★★★★ (1)	Use at an assay dependent concentration.

靶标

功能 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.

疾病相关 Immunodeficiency 46

序列相似性 Belongs to the peptidase M28 family. M28B subfamily.

Contains 1 PA (protease associated) domain.

翻译后修饰 N- and O-glycosylated, phosphorylated and palmitoylated. The serum form is only glycosylated.

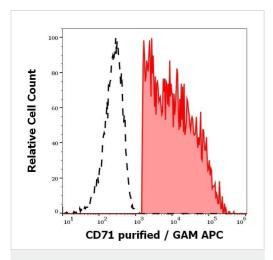
Proteolytically cleaved on Arg-100 to produce the soluble serum form (sTfR).

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

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

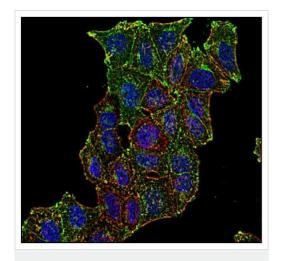
fractions from stage I to stage IV.

图片



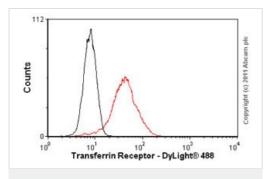
Flow Cytometry - Anti-Transferrin Receptor antibody [MEM-75] (ab9179)

Flow cytometric analysis of Human PHA stimulated Peripheral Blood cells labelling Transferrin Receptor with ab9179 at 0.56 ug/ml showing separation of human CD3 positive CD71 positive lymphocytes (red-filled) from CD3 negative CD71 negative lymphocytes (black-dashed).



Immunocytochemistry/ Immunofluorescence - Anti-Transferrin Receptor antibody [MEM-75] (ab9179)

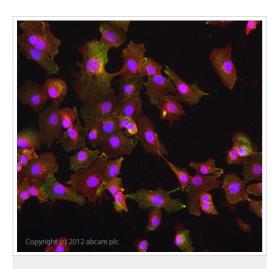
Immunocytochemistry staining of CD71 in human HeLa cell line using anti-CD71 (green). Actin cytoskeleton decorated by phalloidin (red) and cell nuclei stained with DAPI (blue).



Flow Cytometry - Anti-Transferrin Receptor antibody [MEM-75] (ab9179)

Overlay histogram showing Jurkat cells stained with ab9179 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab9179, 1µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a diminished signal in Jurkat cells fixed with methanol (5 min)/permeabilized with 0.1% PBS-

Tween used under the same conditions.



Immunocytochemistry/ Immunofluorescence - Anti-Transferrin Receptor antibody [MEM-75] (ab9179) ab9179 stained DU145 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab9179 at 5µg/ml overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti- mouse (ab96879) lgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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