abcam

Product datasheet

Anti-Transferrin Receptor antibody [MEM-75] ab9179

★★★★★ 1 Abreviews 9 References 画像数 4

製品の概要

製品名 Anti-Transferrin Receptor antibody [MEM-75]

製品の詳細 Mouse monoclonal [MEM-75] to Transferrin Receptor

由来種 Mouse

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

receptor.

アプリケーション 適用あり: Flow Cyt, ICC/IF

種交差性 交差種: Human

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

ポジティブ・コントロール This antibody gave a positive result in IF in the following Formaldehyde fixed cell line: DU145 and

HeLa

特記事項 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

製品の特性

製品の状態 Liquid

保存方法 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.

バッファー pH: 8.0

Preservative: 0.097% Sodium azide

Constituent: PBS

精製度 Protein A purified

特記事項(精製) Purified from TCS. Purity >95% by SDS-PAGE.

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ポリ/モノ モノクローナル クローン名 MEM-75 ミエローマ unknown アイソタイプ IgG1 軽鎖の種類 unknown

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab9179の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
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	*** <u>*</u> (1)	Use at an assay dependent concentration.

ターゲット情報

機能 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.

関連疾患 Immunodeficiency 46

配列類似性 Belongs to the peptidase M28 family. M28B subfamily.

Contains 1 PA (protease associated) domain.

翻訳後修飾 N- and O-glycosylated, phosphorylated and palmitoylated. The serum form is only glycosylated.

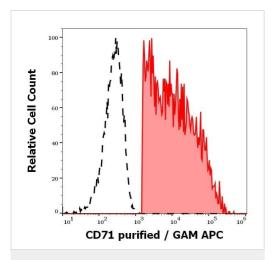
Proteolytically cleaved on Arg-100 to produce the soluble serum form (sTfR).

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

細胞内局在 Secreted and Cell membrane. Melanosome. Identified by mass spectrometry in melanosome

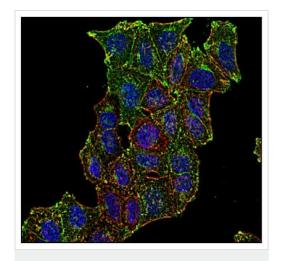
fractions from stage I to stage ${\sf IV}$.

画像



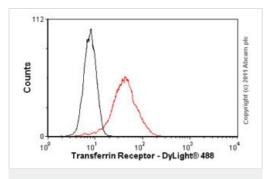
Flow Cytometry - Anti-Transferrin Receptor antibody [MEM-75] (ab9179)

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)

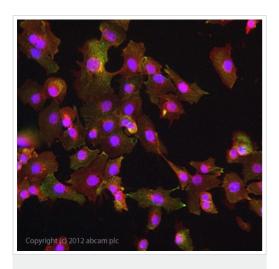
Immunocytochemistry staining of CD71 in human HeLa cell line using anti-CD71 (green). Actin cytoskeleton decorated by phalloidin (red) and cell nuclei stained with DAPI (blue).



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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