# abcam

## Product datasheet

# Anti-Transferrin Receptor antibody [13E4] ab38171

★★★★★ 2 Abreviews 12 References 画像数 2

### 製品の概要

製品名 Anti-Transferrin Receptor antibody [13E4]

製品の詳細 Mouse monoclonal [13E4] to Transferrin Receptor

由来種 Mouse

特異性 This antibody is specific for Transferrin Receptor and the complex between soluble Transferrin

Receptor and Transferrin.

アプリケーション 適用あり: ICC/IF, Flow Cyt

種交差性 交差種: Human

免疫原 Purified human soluble transferrin receptor.

ポジティブ・コントロール This antibody gave a positive result when used in the following formaldehyde fixed cell lines:

DU145.

特記事項 This product was changed from ascites to tissue culture supernatant on 16<sup>th</sup> July 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. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

**バッファー** pH: 7.40

Preservative: 0.1% Sodium azide

Constituent: PBS

精製度 Protein A purified

**ポリ/モノ** モノクローナル

1

クローン名	13E4
<b>₹</b> 1□-₹	Sp2/0
アイソタイプ	lgG2a

### 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ab38171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
ICC/IF		Use a concentration of 5 µg/ml.
Flow Cyt		Use 0.5µg for 10 <sup>6</sup> cells.  ab170191 - Mouse monoclonal lgG2a, is suitable for use as an isotype control with this antibody.

#### 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).

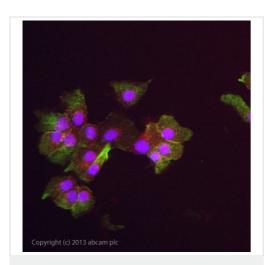
fractions from stage I to stage IV.

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

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

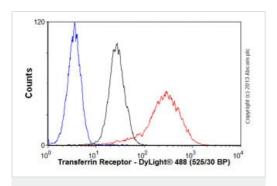
# 画像

細胞内局在



Immunocytochemistry/ Immunofluorescence - Anti-Transferrin Receptor antibody [13E4] (ab38171)

ICC/IF image of ab38171 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 ab38171 at 5µg/ml overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti- mouse (ab96879) lgG (H+L) used at a 1/250 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.



Flow Cytometry - Anti-Transferrin Receptor antibody [13E4] (ab38171)

Overlay histogram showing Jurkat cells stained with ab38171 (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 (ab38171, 0.5µg/1x10<sup>6</sup> 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 IgG2a [ICIGG2A] (ab91361, 1µg/1x10<sup>6</sup> cells) used under the same conditions. Unlabelled sample (blue line). Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in Jurkat cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

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

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