

# Anti-Transferrin Receptor antibody [13E4] ab38171

★★★★★ [2 Abreviews](#) [12 References](#) [2 图像](#)

### 概述

产品名称	Anti-Transferrin Receptor抗体[13E4]
描述	小鼠单克隆抗体[13E4] to Transferrin Receptor
宿主	Mouse
特异性	This antibody is specific for Transferrin Receptor and the complex between soluble Transferrin Receptor and Transferrin.
经测试应用	<b>适用于:</b> ICC/IF, Flow Cyt
种属反应性	<b>与反应:</b> Human
免疫原	Purified human soluble transferrin receptor.
阳性对照	This antibody gave a positive result when used in the following formaldehyde fixed cell lines: DU145.
常规说明	<p>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.</p> <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&amp;As</p>

### 性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	<p>pH: 7.40</p> <p>Preservative: 0.1% Sodium azide</p> <p>Constituent: PBS</p>
纯度	Protein A purified
克隆	单克隆

克隆编号	13E4
骨髓瘤	Sp2/0
同种型	IgG2a

应用

The Abpromise guarantee      **Abpromise™**承诺保证使用ab38171于以下的经测试应用

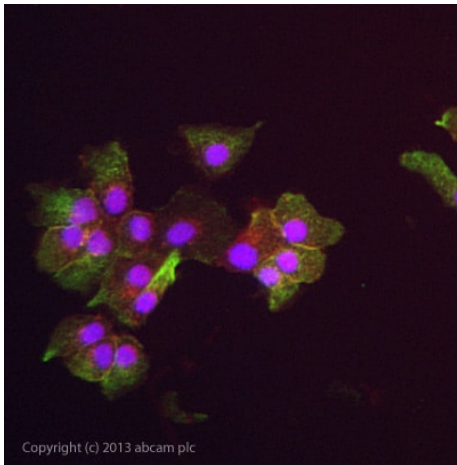
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		Use a concentration of 5 µg/ml.
Flow Cyt		Use 0.5µg for 10 <sup>6</sup> cells. <b>ab170191</b> - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

靶标

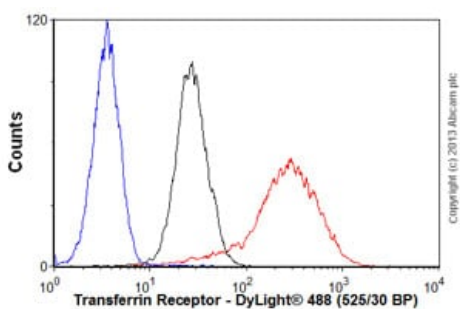
功能	Cellular uptake of iron occurs via receptor-mediated endocytosis of ligand-occupied transferrin receptor into specialized endosomes. Endosomal acidification leads to iron release. The apotransferrin-receptor complex is then recycled to the cell surface with a return to neutral pH and the concomitant 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



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](#)) IgG (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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