# abcam

### **Product datasheet**

## Anti-Transferrin Receptor antibody [EPR4012] - Low endotoxin, Azide free ab228995

重组 RabMAb

2 图像

概述	
产品名称	Anti-Transferrin Receptor <b>抗体</b> [EPR4012] - Low endotoxin, Azide free
描述	兔单克隆抗体[EPR4012] to Transferrin Receptor - Low endotoxin, Azide free
宿主	Rabbit
经测试应用	适用于: WB, Flow Cyt (Intra) 不适用于: ICC/IF
<b>种属反</b> 应性	与反应: Human
	预测可用于: Mouse 🛛 📤
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	Human placenta, TF-1, HeLa and A549 cell lysates
<b>常</b> 规说 <b>明</b>	ab228995 is the carrier-free version of <u>ab108985</u> .
	Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.
	This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.
	Use our <b><u>conjugation kits</u></b> for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.
	This product is compatible with the Maxpar <sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar <sup>®</sup> is a trademark of Fluidigm Canada Inc.
	Our <b>Low endotoxin, azide-free formats</b> have low endotoxin level (≤ 1 EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays.

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C. Do Not Freeze.
存储溶液	pH: 7.20 Constituent: PBS
无载体	是
纯 <b>度</b>	Protein A purified
克隆	单 <b>克隆</b>
克 <b>隆</b> 编号	EPR4012
同种型	lgG

#### 应用

#### The Abpromise guarantee Abpromise™承诺保证使用ab228995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。

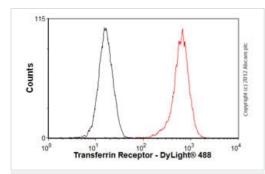
应用	Ab评论	说明
WB		Use at an assay dependent concentration.
Flow Cyt (Intra)		Use at an assay dependent concentration. <u>ab199376</u> - Rabbit monoclonal IgG (Low endotoxin, Azide free), is suitable for use as an isotype control with this antibody.

#### 应用说明

Is unsuitable for ICC/IF.

#### 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.
<b>翻</b> 译 <b>后修</b> 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 <b>胞定位</b>	Secreted and Cell membrane. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.



Flow Cytometry (Intracellular) - Anti-Transferrin Receptor antibody [EPR4012] - Low endotoxin, Azide free (ab228995) This Intracellular Intracellular Flow Cyt data was generated using the same anti-Transferrin Receptor antibody clone, EPR4012, in a different buffer formulation (cat

#### <u>ab108985</u>).

Overlay histogram showing Jurkat cells stained with <u>ab108985</u> (red line). The cells were fixed with 80% methanol (5 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 (<u>ab108985</u>, 1/100) for 30 min at 22�C. The secondary antibody used was DyLight� 488 goat anti-rabbit lgG (H+L) (<u>ab96899</u>) at 1/500 dilution for 30 min at 22�C. Isotype control antibody (black line) was rabbit lgG (monoclonal) (1�g/1x10<sup>6</sup>cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in Jurkat cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



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