# abcam

## Product datasheet

# Anti-Transferrin Receptor antibody ab84036

★★★★★ 22 Abreviews 173 References 画像数 3

#### 製品の概要

製品名 Anti-Transferrin Receptor antibody

製品の詳細 Rabbit polyclonal to Transferrin Receptor

由来種 Rabbit

特異性 From Jan 2024, QC testing of replenishment batches of this polyclonal changed. All tested and

expected application and reactive species combinations are still covered by our Abcam product promise. However, we no longer test all applications. For more information on a specific batch,

please contact our Scientific Support who will be happy to help.

アプリケーション 適用あり: WB, ICC/IF

種交差性 交差種: Mouse, Human

交差が予測される動物種: Dog, Pig, Orangutan 🔷

免疫原 Synthetic peptide corresponding to Human Transferrin Receptor aa 1-100 conjugated to keyhole

limpet haemocyanin.

Database link: **P02786** 

(Peptide available as ab101219)

ポジティブ・コントロール ICC/IF: HeLa cells, WB: HeLa.

特記事項
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

ICC/IF: HeLa cells, WB: HeLa, Jurkat and U-2 OS whole cell lysates; Mouse spleen tissue lysate.

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: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

精製度 Immunogen affinity purified

**ポリ/モノ** ポリクローナル

アイソタイプ IgG

#### 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ab84036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
WB	**** <u>(9)</u>	Use a concentration of 1 µg/ml. Detects a band of approximately 98 kDa (predicted molecular weight: 84 kDa).
ICC/IF	<b>★★★★☆</b> (6)	Use a concentration of 5 µg/ml.

#### ターゲット情報

機能	Cellular uptake of iron occurs	via receptor-mediated endo	cytosis 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.

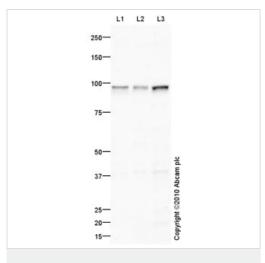
Proteolytically cleaved on Arg-100 to produce the soluble serum form (sTfR).

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 IV.

#### 画像



Western blot - Anti-Transferrin Receptor antibody (ab84036)

All lanes: Anti-Transferrin Receptor antibody (ab84036) at 1 µg/ml

Lane 1 : HeLa (Human epithelial carcinoma cell line) whole cell lysate

Lane 2 : Jurkat (Human T cell lymphoblast-like cell line) whole cell

Lane 3: U-2 OS (Human osteosarcoma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

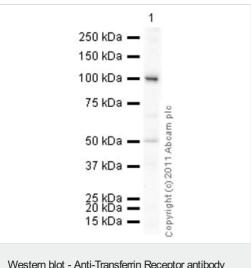
**Predicted band size:** 84 kDa **Observed band size:** 98 kDa

Additional bands at: 37 kDa. We are unsure as to the identity of

these extra bands.

Exposure time: 4 minutes

Transferrin Receptor contains a number of potential glycosylation sites (SwissProt) which may explain its migration at a higher molecular weight than predicted.



Western blot - Anti-Transferrin Receptor antibody (ab84036)

Anti-Transferrin Receptor antibody (ab84036) at 1  $\mu$ g/ml + Mouse spleen tissue lysate at 10  $\mu$ g

#### Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

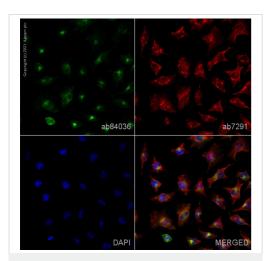
**Predicted band size:** 84 kDa **Observed band size:** 100 kDa

Additional bands at: 50 kDa. We are unsure as to the identity of

these extra bands.

Exposure time: 8 minutes

Transferrin Receptor contains a number of potential glycosylation sites (SwissProt) which may explain its migration at a higher molecular weight than predicted.



Immunocytochemistry/ Immunofluorescence - Anti-Transferrin Receptor antibody (ab84036)

ab84036 staining Transferrin receptor protein 1 in HeLa cells. The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.1% PBS-Tween for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab84036 at 5 µg/ml and ab7291, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with ab150081, Goat polyclonal Secondary Antibody to Rabbit lgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and ab150120, Goat polyclonal Secondary Antibody to Mouse lgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.

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

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