

# Anti-Transferrin Receptor antibody [11F5] ab10249

## 2 References

### Overview

<b>Product name</b>	Anti-Transferrin Receptor antibody [11F5]
<b>Description</b>	Mouse monoclonal [11F5] to Transferrin Receptor
<b>Host species</b>	Mouse
<b>Specificity</b>	This antibody reacts with human soluble transferrin receptor.
<b>Tested applications</b>	<b>Suitable for:</b> ELISA, Sandwich ELISA
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant full length protein (Human).
<b>General notes</b>	<p>Concentration varies from lot to lot and can be provided on request.</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>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	<p>pH: 7.40</p> <p>Preservative: 0.1% Sodium azide</p> <p>Constituent: PBS</p>
<b>Purity</b>	Protein A purified
<b>Purification notes</b>	Purity tested by electrophoresis.
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	11F5
<b>Myeloma</b>	Sp2/0
<b>Isotype</b>	IgG2b

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab10249 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ELISA		
Sandwich ELISA		

### Application notes

ELISA: Use at an assay dependent dilution.

sELISA: Can be paired for ELISA with **Mouse monoclonal [7F8] to Transferrin Receptor (HRP) (ab10254)**. Can be used as detection antibody with **Mouse monoclonal [2B6] to Transferrin Receptor (ab38168) as capture antibody**. Use at an assay dependent dilution.

Not yet tested in other applications.

Optimal dilutions/concentrations should be determined by the end user.

## Target

### Function

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 hereditary 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.

### Involvement in disease

Immunodeficiency 46

### Sequence similarities

Belongs to the peptidase M28 family. M28B subfamily.  
Contains 1 PA (protease associated) domain.

### Post-translational modifications

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.

### Cellular localization

Secreted and Cell membrane. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

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

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