

Product datasheet

Biotin Anti-Transferrin Receptor antibody [R17217.1.4] ab63333

Overview

Product name	Biotin Anti-Transferrin Receptor antibody [R17217.1.4]
Description	Biotin Rat monoclonal [R17217.1.4] to Transferrin Receptor
Host species	Rat
Conjugation	Biotin
Specificity	The clone number has been updated from (1.BB.713) to (R17217.1.4) both clone numbers name the same antibody clone.
Tested applications	Suitable for: IHC-Fr, IHC-P, IP, ICC/IF, Flow Cyt
Species reactivity	Reacts with: Mouse
Immunogen	Tissue, cells or virus corresponding to Mouse Transferrin Receptor. DMSO induced Friend erythroleukemia 745.6
General notes	<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&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.1% Sodium azide Constituent: PBS
Purification notes	purified by affinity chromatography
Clonality	Monoclonal
Clone number	R17217.1.4
Isotype	IgG2a

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab63333 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
IHC-Fr		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
Flow Cyt		Use 1µg for 10 ⁶ cells. ab18445 - Rat monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

Target

Function	<p>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).</p> <p>(Microbial infection) Acts as a receptor for new-world arenaviruses: Guanarito, Junin and Machupo virus.</p>
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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