abcam

Product datasheet

Anti-Transferrin Receptor antibody [B349 (DF1513)] ab8598

2 Abreviews 6 References

Overview

Product name	Anti-Transferrin Receptor antibody [B349 (DF1513)]
Description	Mouse monoclonal [B349 (DF1513)] to Transferrin Receptor
Host species	Mouse
Specificity	This antibody reacts with the transferrin receptor, a 180-190 kD transmembrane glycoprotein which exists as a 95 kD homodimer with interchain disulfide bond. The specificity of these antibodies, as demonstrated by immunoprecipitation, are equivalent to OKT9, B3/25 and BerT9. This antibody reacts with many proliferating cells in both normal and neoplastic tissues. It also reacts with renal tubular epithelium, islets of Langerhans, scattered cells in the anterior pituitary, hepatocytes and most tissue macrophages.
Tested applications	**Suitable for:** IHC-Fr, ICC/IF, Flow Cyt, WB
Species reactivity	**Reacts with:** Human
Immunogen	Tissue, cells or virus corresponding to Human Transferrin Receptor. Cell line KG1.
Positive control	Tonsil.
General notes	This antibody is an indicator of proliferation activity. It also has prognostic significance when typing tumors, such as leukemias and lymphomas. 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. 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

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: 7.40 Preservative: 0.1% Sodium azide Constituent: PBS
Purity	Protein G purified
Primary antibody notes	This antibody is an indicator of proliferation activity. It also has prognostic significance when typing tumors, such as leukemias and lymphomas.
Clonality	Monoclonal
Clone number	B349 (DF1513)
Myeloma	unknown
Isotype	IgG1
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab8598 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.
ICC/IF	★★★★★ (1)	Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. **ab170190** - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
WB	★★★★☆ (1)	Use at an assay dependent concentration.

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 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.
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"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors