

ARG23214 anti-CD71 / Transferrin Receptor antibody [YTA74.4] (FITC)

Package: 100 µg
Store at: 4°C

Summary

Product Description	FITC-conjugated Rat Monoclonal antibody [YTA74.4] recognizes CD71 / Transferrin Receptor Rat anti Mouse CD71 antibody, clone YTA74. 4 recognizes the mouse Transferrin receptor protein 1 also known as CD71 or TfR1. CD71 is a 763 amino acid glycoprotein homodimer of ~95 kDa subunits. CD71 is expressed by dividing cells, and functions as a transferrin receptor mediating uptake of iron. Rat anti Mouse CD71 antibody, clone YTA74. 4 blocks the binding of R17 217. 1. 3. and R17 208. 2 anti-TFR monoclonal antibodies (Trowbridge et al. 1982).
Tested Reactivity	Ms
Tested Application	FACS
Host	Rat
Clonality	Monoclonal
Clone	YTA74.4
Isotype	IgG2a
Target Name	CD71 / Transferrin Receptor
Species	Mouse
Immunogen	Concanavilin A activated Mouse spleen cells.
Conjugation	FITC
Alternate Names	TFR1; CD antigen CD71; CD71; T9; p90; TR; Trfr; Transferrin receptor protein 1; TRFR; sTfR; TfR1; TfR; TFR

Application Instructions

Application table	Application	Dilution
	FACS	1:50 - 1:100

Application Note FACS: Use 10 µl of the suggested working dilution to label 10⁶ cells in 100 µl.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Purified by ion exchange chromatography.
Buffer	PBS, 0.09% Sodium azide and 1% BSA.
Preservative	0.09% Sodium azide
Stabilizer	1% BSA
Concentration	0.1 mg/ml
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid

repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	TFRC
Gene Full Name	transferrin receptor
Background	This gene encodes a cell surface receptor necessary for cellular iron uptake by the process of receptor-mediated endocytosis. This receptor is required for erythropoiesis and neurologic development. Multiple alternatively spliced variants have been identified. [provided by RefSeq, Sep 2015]
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. [UniProt]
Calculated Mw	85 kDa
PTM	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. [UniProt]