

## ARG23215 anti-CD71 / Transferrin Receptor antibody [YTA74.4]

Package: 100 µg  
Store at: -20°C

### Summary

Product Description	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, IHC-Fr, IP
Host	Rat
Clonality	Monoclonal
Clone	YTA74.4
Isotype	IgG2a
Target Name	CD71 / Transferrin Receptor
Species	Mouse
Immunogen	Concanavilin A activated Mouse spleen cells.
Conjugation	Un-conjugated
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
	IHC-Fr	Assay-dependent
	IP	Assay-dependent
Application Note	FACS: Use 10 µl of the suggested working dilution to label 10 <sup>6</sup> 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	Purification with Protein G.
Buffer	PBS and 0.09% Sodium azide.
Preservative	0.09% Sodium azide
Concentration	1 mg/ml

<b>Storage instruction</b>	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
<b>Note</b>	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

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<b>Gene Symbol</b>	TFRC
<b>Gene Full Name</b>	transferrin receptor
<b>Background</b>	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]
<b>Function</b>	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]
<b>Calculated Mw</b>	85 kDa
<b>PTM</b>	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]