



Rat Anti-Mouse CD71 (TfR1) Monoclonal antibody, clone R17 217.1.3/TIB-219 (CABT-L4452)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview

The R17 217.1.3/TIB-219 monoclonal antibody reacts with mouse CD71 also known as transferrin receptor protein 1 (TfR1). CD71 is a 170-180 kDa type II homodimeric transmembrane glycoprotein which is expressed on the surface of proliferating cells, reticulocytes, and erythroid precursors. CD71 plays a role in the control of cellular proliferation and is required for iron import from transferrin into cells by endocytosis. Due to its important role in proliferation and cellular iron intake as well as the fact that many cancerous cells express high levels of CD71 it is being explored as a potential new target in cases of human leukemia & lymphoma. The R17 217.1.3/TIB-219 antibody has been shown to deplete CD71+ erythroid splenocytes.

Target	Mouse CD71 (TfR1)
Immunogen	Mouse erythroleukemia cell line 745.6
Isotype	IgG2a, κ
Source/Host	Rat
Species Reactivity	Mouse
Clone	R17 217.1.3/TIB-219
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vivo depletion of CD71+ cells

Molecular Weight	150 kDa
Format	0.2 µM filtered liquid. Purified from tissue culture supernatant in an animal free facility
Concentration	Lot specific
Size	5 mg
Buffer	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free] Endotoxin level: <2EU/mg (<0.002EU/µg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB04
Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	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. Mice that are deficient in this receptor show impaired erythroid development and abnormal iron homeostasis. [provided by RefSeq, Mar 2010]
Keywords	TFRC;transferrin receptor;TR;TFR;p90;CD71;TFR1;Trfr;Mtvr1;Mtvr-1;AI195355;AI426448;AU015758;2610028K12Rik;E430033M20Rik;transferrin receptor protein 1;mammary tumor virus receptor 1;

GENE INFORMATION

Official Symbol	transferrin receptor
Synonyms	TFRC; transferrin receptor; TR; TFR; p90; CD71; TFR1; Trfr; Mtvr1; Mtvr-1; AI195355; AI426448; AU015758; 2610028K12Rik; E430033M20Rik; transferrin receptor protein 1; mammary tumor virus receptor 1;
References	Wynn, J. L., et al. (2015). "Neonatal CD71+ Erythroid Cells Do Not Modify Murine Sepsis Mortality." J Immunol 195(3): 1064-1070. PubMed;