

### Datasheet for ABIN3029214

## anti-Transferrin Receptor antibody (AA 649-677)





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Overview		
Quantity:	0.4 mL	
Target:	Transferrin Receptor (TFRC)	
Binding Specificity:	AA 649-677	
Reactivity:	Human	
Host:	Rabbit	
Clonality:	Polyclonal	
Conjugate:	This Transferrin Receptor antibody is un-conjugated	
Application:	Flow Cytometry (FACS), Western Blotting (WB), Immunohistochemistry (IHC), ELISA	
Product Details		
Immunogen:	A portion of amino acids 649-677 from the human protein was used as the immunogen for this	
	CD71 antibody.	
Isotype:	Ig Fraction	
Purification:	Purified	
Target Details		
Target:	Transferrin Receptor (TFRC)	
Alternative Name:	CD71 (TFRC Products)	
Background:	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). Useful in studies of dividing haematopoietic and tumour cell populations, and metabolic activity. A second ligand, the heditary hemochromatosis protein HFE, competes for binding with transferrin for an overlapping C terminal binding site. The antigen is present on most dividing cells, including normally cycling in vivo hematopoietic progenitor cells, mitogenically stimulated cells in vitro, some primary tumor cells and most proliferating cells in vitro. The transferrin receptor has been structurally characterized as a sulfide bound dimer of identical glycoprotein subunits of 95 kDa. The transferrin receptor is not present on resting blood lymphocytes. On PBL, the receptor appears after activation. The expression of transferrin receptor is coordinately regulated with cell growth. Present on T and B cell lines. The soluble (or serum) transferrin receptor (sTfR) is a circulating truncated form of the membrane receptor protein, it is an 85 kDa glycoprotein forming in serum a 320 kDa complex with diferric transferrin. The most important clinical use of the sTfR determination is in the differential diagnosis between iron deficiency anaemia and the anaemia of chronic disease. This antibody is an indicator of proliferation activity. It also has prognostic significance when typing tumors, such as leukemias and lymphomas.

UniProt:	P02786

Pathways: Transition Metal Ion Homeostasis

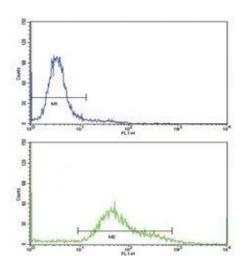
#### **Application Details**

Application Notes:	Titration of the CD71 antibody may be required due to differences in protocols and secondary/substrate sensitivity.\. Western blot: 1:1000,IHC (Paraffin): 1:10-1:50,Flow Cytometry: 1:10-1:50	
Restrictions:	For Research Use only	
Handling		
Format:	Liquid	
Buffer:	In 1X PBS, pH 7.4, with 0.09 % sodium azide	
Preservative:	Sodium azide	
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.	

#### Handling

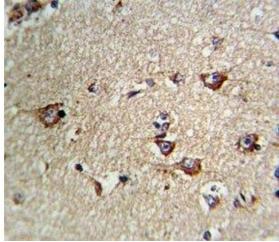
Storage:	-20 °C
Storage Comment:	Aliquot the CD71 antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.

#### **Images**



#### **Flow Cytometry**

**Image 1.** Flow cytometric analysis of HeLa cells using CD71 antibody (bottom histogram) compared to a negative control (top histogram). FITC-conjugated goat-anti-rabbit secondary Ab was used for the analysis.



#### **Immunohistochemistry**

**Image 2.** IHC analysis of FFPE human brain tissue stained with CD71 antibody

# 95 - 4 72 - 55 55 - 36 28

#### **Western Blotting**

Image 3. Western blot analysis of CD71 antibody and HeLa lysate. Predicted molecular weight 85~100 kDa

Please check the product details page for more images. Overall 5 images are available for ABIN3029214.