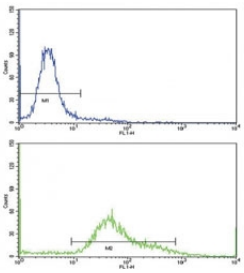
CD71 Antibody (F48348)

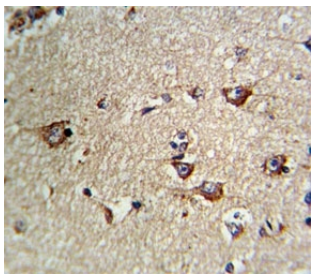
Catalog No.	Formulation	Size
F48348-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F48348-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

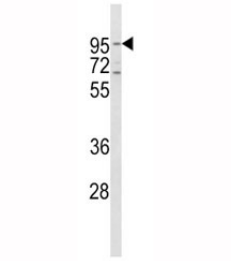
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	P02786
Applications	Western Blot : 1:1000 IHC (Paraffin) : 1:10-1:50 Flow Cytometry : 1:10-1:50
Limitations	This CD71 antibody is available for research use only.



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.



IHC analysis of FFPE human brain tissue stained with CD71 antibody



Western blot analysis of CD71 antibody and HeLa lysate. Predicted molecular weight 85~95 kDa

Description

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.

Application Notes

Titration of the CD71 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 649-677 from the human protein was used as the immunogen for this CD71 antibody.

Storage

Aliquot the CD71 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.