

# CD71 (PN0403) Nb-FC recombinant antibody

CatalogNo: YA0422 Recombinant R

#### **Key Features**

Reactivity Applications
• Human • ELISA

#### **Recommended Dilution Ratios**

ELISA 1:5000-100000 Flow Cyt 1-2µg/Test

## Storage

**Storage\*** -15°C to -25°C/1 year(Avoid freeze / thaw cycles)

**Formulation** Phosphate-buffered solution

#### **Basic Information**

**Source** Camel, chimeric fusion of Nanobody (VHH) and mouse IgG1 Fc domain, recombinantly

produced from 293F cell

**Purification** Camel, chimeric fusion of Nanobody (VHH) and mouse IgG1 Fc domain, recombinantly

produced from 293F cell

Clone Number PN0403

## Immunogen Information

Immunogen	Purified recombinant Human CD71
Specificity	This recombinant monoclonal antibody can detects endogenous levels of CD71 protein.

## | Target Information

Gene name TFRC

**Protein Name** 

Transferrin receptor protein 1 (TR) (TfR) (TfR1) (Trfr) (T9) (p90) (CD antigen CD71) [Cleaved into: Transferrin receptor protein 1, serum form (sTfR)]

Organism Gene ID UniProt ID

Human <u>6402;</u> <u>P02786;</u>

Cellular Localization Cell membrane; Single-pass type II membrane protein. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV. .; [Transferrin receptor protein 1, serum form]: Secreted.

**Tissue specificity** Expressed in B-cell lines and T-lymphocytes.

**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 heditary hemochromatosis protein HFE, competes for binding with transferrin for an overlapping C-terminal binding site. Positively regulates T and B cell proliferation through iron uptake . Acts as a lipid sensor that regulates mitochondrial fusion by regulating activation of the JNK pathway . When dietary levels of stearate (C18:0) are low, promotes activation of the JNK pathway, resulting in HUWE1-mediated ubiquitination and subsequent degradation of the mitofusin MFN2 and inhibition of mitochondrial fusion . When dietary levels of stearate (C18:0) are high, TFRC stearoylation inhibits activation of the JNK pathway and thus degradation of the mitofusin MFN2 . ; (Microbial infection) Acts as a receptor for new-world arenaviruses: Guanarito,

Iunin and Machupo virus.

## **Validation Data**

#### | Contact information

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Please scan the QR code to access additional product information:

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Antibody | ELISA Kits | Protein | Reagents