

**MAC036Hu21****Monoclonal Antibody to Transferrin (TRF)****Organism Species: Homo sapiens (Human)*****Instruction manual***

FOR IN VITRO USE AND RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

9th Edition (Revised in Jul, 2013)

**[ PRODUCT INFORMATION ]****Immunogen:** TRF**Clonality:** Monoclonal**Clone number:** A4**Host:** Mouse**Immunoglobulin Type:** IgG1 Kappa**Purification:** Affinity Chromatography.**Applications:** WB, ICC, IHC-P, IHC-F, ELISA**Concentration:** 500µg/mL**UOM:** 200µg**[ IMMUNOGEN INFORMATION ]****Immunogen:** Native Protein**Accession No.:** NPC036Hu01**[ RELEVANCE ]**

Transferrins are iron-binding blood plasma glycoproteins that control the level of free iron in biological fluids. When a transferrin protein loaded with iron encounters a transferrin receptor on the surface of a cell, it binds to it and, as a consequence, is transported into the cell in a vesicle by receptor-mediated endocytosis. The liver is the main site of transferrin synthesis, but other tissues and organs, such as the brain, also produce it. Transferrin is also associated with the innate immune system. It is found in the mucosa and binds iron, thus creating an environment low in free iron that impedes bacterial survival in a process called iron withholding. The level of transferrin decreases in inflammation. Transferrin imbalance can have serious health effects for those with low or high serum transferrin levels.

## **[ ANTIBODY SPECIFICITY ]**

The antibody is a mouse monoclonal antibody raised against TRF. It has been selected for its ability to recognize TRF in immunohistochemical staining and western blotting.

## **[ APPLICATIONS ]**

Western blotting: 1:100-400

Immunocytochemistry in formalin fixed cells: 1:100-500

Immunohistochemistry in formalin fixed frozen section: 1:100-500

Immunohistochemistry in paraffin section: 1:50-200

Enzyme-linked Immunosorbent Assay: 1:100-200

Optimal working dilutions must be determined by end user.

## **[ CONTENTS ]**

**Form & Buffer:** Supplied as solution form in PBS, pH7.4, containing 0.02% NaN<sub>3</sub>, 50% glycerol.

## **[ STORAGE ]**

Store at 4°C for frequent use. Stored at -20°C to -80°C in a manual defrost freezer for one year without detectable loss of activity. Avoid repeated freeze-thaw cycles.