

Transferrin/TF Monoclonal Antibody

catalog number: AN200256P

Note: Centrifuge before opening to ensure complete recovery of vial contents.

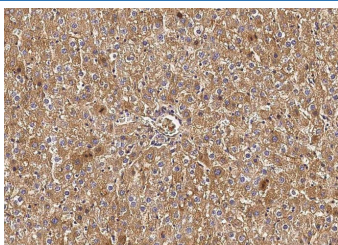
Description

Reactivity	Rat
Immunogen	Recombinant Rat Transferrin/TF Protein
Host	Mouse
Isotype	IgG1
Clone	12B9
Purification	Protein A
Buffer	0.2 µm filtered solution in PBS

Applications Recommended Dilution

IHC-P	1:50-1:200
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Data



Immunohistochemistry of paraffin-embedded rat liver using Transferrin/TF Monoclonal Antibody at dilution of 1:60.

Preparation & Storage

Storage	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
Shipping	Ice bag

Background

Transferrin is a glycoprotein with an approximate molecular weight of 76.5 kDa. This glycoprotein is thought to have been created as a result of an ancient gene duplication event that led to generation of homologous C and N-terminal domains each of which binds one ion of ferric iron. The function of Transferrin is to transport iron from the intestine, reticuloendothelial system, and liver parenchymal cells to all proliferating cells in the body. This protein may also have a physiologic role as granulocyte/pollen-binding protein (GPBP) involved in the removal of certain organic matter and allergens from serum. Transferrins are iron binding transport proteins that bind Fe³⁺ ion in association with the binding of an anion, usually bicarbonate. This transferrin binds only one Fe³⁺ ion per protein molecule. Transports iron ions from the hemolymph into the eggs during the vitellogenic stage. Transferrins are iron binding transport proteins which can bind two Fe(3+) ions in association with the binding of an anion, usually bicarbonate. It is responsible for the transport of iron from sites of absorption and heme degradation to those of storage and utilization. Serum transferrin may also have a further role in stimulating cell proliferation. When a transferrin loaded with iron encounters with a transferring receptor on cell surface, transferring binds to it and, as a consequence, is transported into the cell in a vesicle by receptor-mediated endocytosis. The pH is reduced by hydrogen ion pumps. The lower pH causes transferrin to release its iron ions. The receptor is then transported through the endocytic cycle back to the cell surface, ready for another round of iron uptake. Each transferrin molecule has the ability to carry two iron ions in the ferric form.

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