

**Anti-Transferrin Picoband Antibody**  
**Catalog # ABO12513****Specification**

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**Anti-Transferrin Picoband Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P02787</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Serotransferrin(TF) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Transferrin Picoband Antibody - Additional Information**

**Gene ID** 7018

**Other Names**

Serotransferrin, Transferrin, Beta-1 metal-binding globulin, Siderophilin, TF

**Calculated MW**

77064 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat  
Western blot, 0.1-0.5 µg/ml, Human, Rat

**Subcellular Localization**

Secreted.

**Tissue Specificity**

Expressed by the liver and secreted in plasma.

**Protein Name**

Serotransferrin

**Contents**

Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human Transferrin (20-49aa VPDKTVRWCAVSEHEATKQSFDRDHMKSVI), different from the related mouse and rat sequences by five amino acids.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Anti-Transferrin Picoband Antibody - Protein Information**

**Name** TF ([HGNC:11740](#))

**Function**

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. (Microbial infection) Serves as an iron source for parasite T.brucei (strain 427), which capture TF via its own transferrin receptor ESAG6:ESAG7 and extract its iron for its own use.

**Cellular Location**

Secreted.

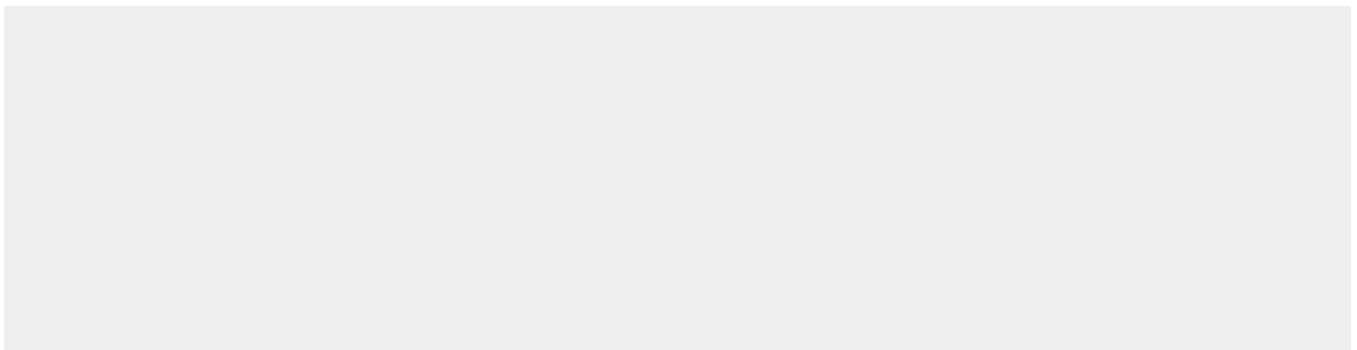
**Tissue Location**

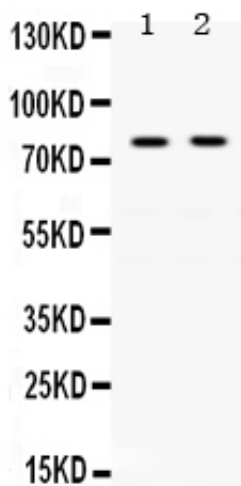
Expressed by the liver and secreted in plasma.

**Anti-Transferrin Picoband Antibody - Protocols**

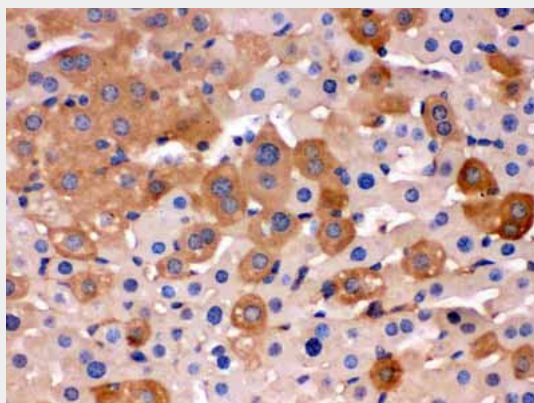
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

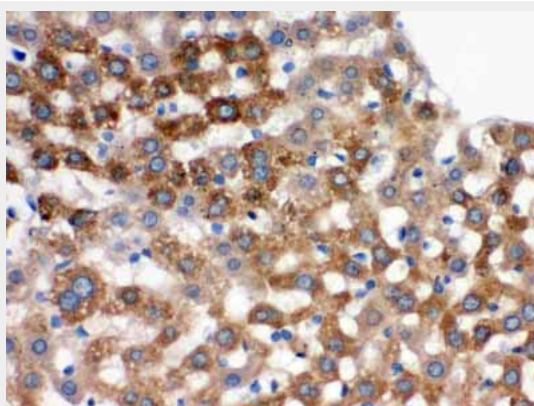
**Anti-Transferrin Picoband Antibody - Images**



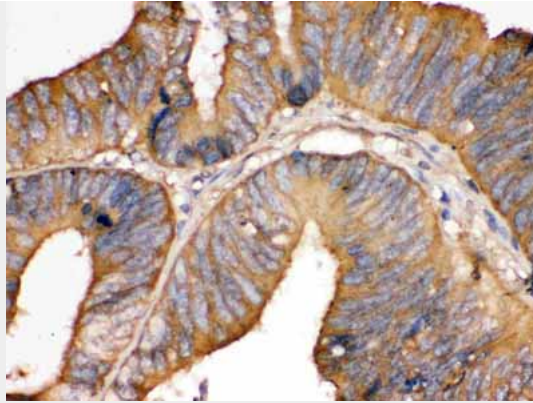
Anti- Transferrin Picoband antibody, ABO12513, Western blotting All lanes: Anti Transferrin (ABO12513) at 0.5ug/ml  
Lane 1: Rat Thymus Tissue Lysate at 50ug  
Lane 2: Human Placenta Tissue Lysate at 50ug  
Predicted bind size: 77KD  
Observed bind size: 77KD



Anti- Transferrin Picoband antibody, ABO12513, IHC(P) IHC(P): Mouse Liver Tissue



Anti- Transferrin Picoband antibody, ABO12513, IHC(P) IHC(P): Rat Liver Tissue



Anti- Transferrin Picoband antibody, ABO12513,IHC(P)IHC(P): Human Intestinal Cancer Tissue

#### **Anti-Transferrin Picoband Antibody - Background**

Transferrins are iron-binding blood plasma glycoproteins that control the level of free iron in biological fluids. In humans, it is encoded by the TF gene. Transferrin consists of a polypeptide chain containing 679 amino acids in humans. The protein is composed of alpha helices and beta sheets to form two domains. The N- and C- terminal sequences are represented by globular lobes and between the two lobes is an iron-binding site. Transferrin is a glycoprotein that binds iron very tightly but reversibly. Although iron bound to transferrin is less than 0.1% (4 mg) of the total body iron, it is the most important iron pool, with the highest rate of turnover (25 mg/24 h). And Transferrin has a molecular weight of around 80 kDa and contains 2 specific high-affinity Fe(III) binding sites. The affinity of transferrin for Fe(III) is extremely high ( $10^{23} \text{ M}^{-1}$  at pH 7.4) but decreases progressively with decreasing pH below neutrality.