

Basic Information

Product Name	Anti-Transferrin/TF Antibody	
Gene Name	TF	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC	
Contents	500 ug/ml antibody with PBS , 0.02% NaN3 , 1 mg BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human Transferrin (20-49aa VPDKTVRWCAVSEHEATKCQSFRDHMKSVI), different from the related mouse and rat sequences by five amino acids.	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	76KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry(Paraffin-embedded Section): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

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 (1023 M⁻¹ at pH 7.4) but decreases progressively with decreasing pH below neutrality.

Selected Validation Data



Figure 1. Western blot analysis of Anti-TF antibody (PB9827). The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: Rat thymus tissue lysates, Lane 2: Human placenta tissue lysates, Use rabbit Anti-TF 1:1000, probed with a goat Anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for TF at approximately 77KD. The expected band size for TF is at 77KD.

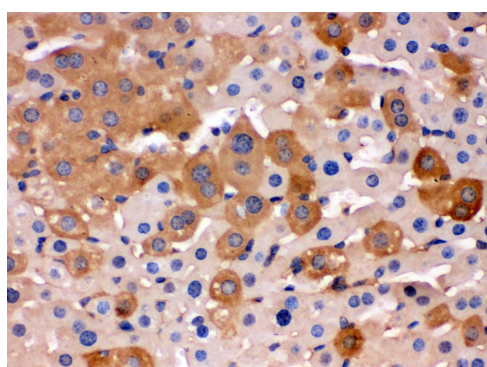


Figure 2. IHC analysis using Anti-TF antibody (PB9827) detected in paraffin-embedded section of mouse liver tissue. Biotinylated goat Anti-rabbit IgG was used as secondary antibody. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.