

# **Transferrin Antibody**

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22124a

## **Specification**

## **Transferrin Antibody - Product Information**

**Application** WB, IHC-P, FC,E **Primary Accession** P02787 Other Accession A5A6I6 Reactivity Human Host Rabbit Clonality polyclonal Isotype Rabbit IgG Calculated MW 77064

## **Transferrin Antibody - Additional Information**

#### **Gene ID 7018**

## **Other Names**

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

## **Target/Specificity**

This Transferrin antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 432-466 amino acids from human Transferrin.

#### **Dilution**

WB~~1:2000 IHC-P~~1:25 FC~~1:25

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Transferrin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **Transferrin 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** 

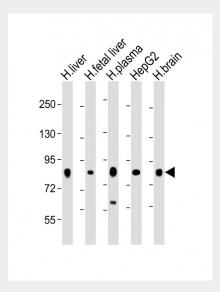
Expressed by the liver and secreted in plasma.

## **Transferrin Antibody - Protocols**

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

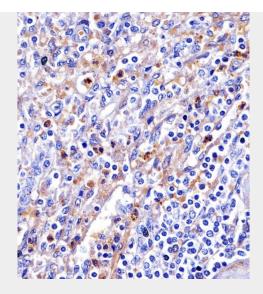
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## **Transferrin Antibody - Images**

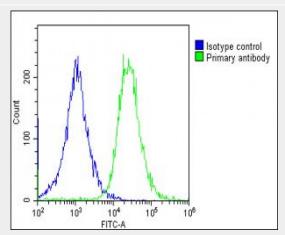


All lanes : Anti-Transferrin Antibody at 1:2000 dilution Lane 1: human liver lysate Lane 2: human fetal liver lysate Lane 3: human plasma lysate Lane 4: HepG2 whole cell lysate Lane 5: human brain lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 77 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





AP22124a staining Transferrin in human spleen tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



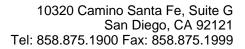
Overlay histogram showing HepG2 cells stained with AP22124a(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22124a, 1:25 dilution) for 60 min at 37°C. The secondary Goat-Anti-Rabbit antibody used was IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OE188374) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit  $IgG1 (1\mu g/1 \times 10^6 cells)$  used under the same conditions. Acquisition of >10, 000 events was performed.

## **Transferrin Antibody - Background**

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.

## **Transferrin Antibody - References**

Yang F., et al. Proc. Natl. Acad. Sci. U.S.A. 81:2752-2756(1984).





Schaeffer E., et al. Gene 56:109-116(1987). Hershberger C.L., et al. Ann. N. Y. Acad. Sci. 646:140-154(1991). Beutler E., et al. Blood 96:4071-4074(2000). Muzny D.M., et al. Nature 440:1194-1198(2006).