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Datasheet for ABIN6940685

anti-Transferrin antibody (AA 311-445)

3 Images

Overview

Quantity:	100 µg
Target:	Transferrin (TF)
Binding Specificity:	AA 311-445
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Application:	ELISA, Immunohistochemistry (IHC), Coating (Coat), Staining Methods (StM)

Product Details

Immunogen:	Recombinant fragment (around aa 311-445) of human TF protein (exact sequence is proprietary)
Clone:	TF-3001
Isotype:	IgG1 kappa
Purification:	Purified by Protein A/G

Target Details

Target:	Transferrin (TF)
Alternative Name:	Transferrin (Early Marker of Oligodendrocytes) (TF Products)
Background:	Iron (Fe) is a tightly metabolically controlled mineral and growth factor present in all living cells. Iron not bound in erythrocyte hemoglobin is transported by transferrin (Tf), the iron transport protein of vertebrate serum. The transferrin protein contains two homologous domains, each of

Target Details

which contain an Fe-binding site. The majority of transferrin is synthesized in the liver and secreted into the blood, but it is also produced in lower amounts in testis and brain as well as in oligodendrocytes, where transferrin is an early marker of oligodendrocyte differentiation. From the blood, transferrin is internalized by erythroblasts and reticulocytes upon binding the transferrin receptor (TfR), also designated CD71, through a system of coated pits and vesicles. After Fe release, transferrin is returned to the extracellular medium, where it can be reused. Defects in the transferrin gene results in atransferrinemia, a rare autosomal recessive disorder characterized by microcytic anemia and iron loading.

Molecular Weight:	79kDa
Gene ID:	7018
UniProt:	P02787
Pathways:	Transition Metal Ion Homeostasis

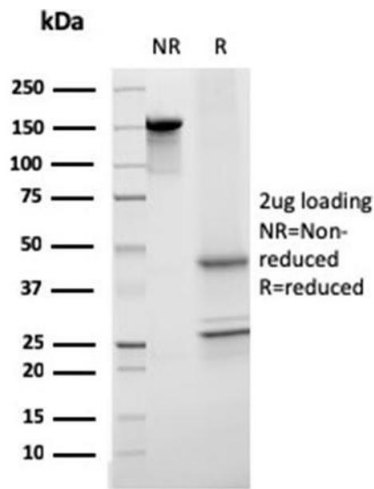
Application Details

Application Notes: Positive Control: Jurkat, HeLa, MCF-7 or K562 cells. Human liver.
Known Application: ELISA (Use Ab at 2-4 µg/mL for coating) (Order Ab without BSA), Immunohistochemistry (Formalin-fixed) (1-2 µg/mL for 30 minutes at RT)(Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 minutes) Optimal dilution for a specific application should be determined.

Restrictions: For Research Use only

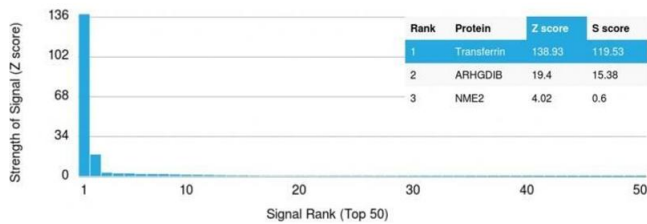
Handling

Concentration:	200 µg/mL
Buffer:	10 mM PBS with 0.05 % BSA & 0.05 % azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C, -80 °C
Storage Comment:	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.



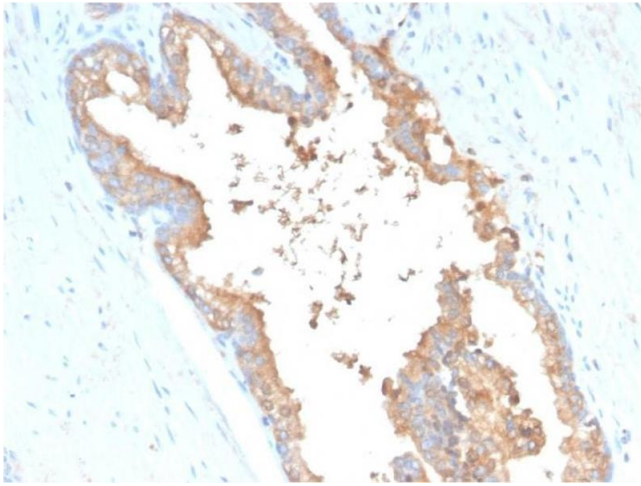
SDS-PAGE

Image 1. SDS-PAGE Analysis Purified Monospecific Mouse Monoclonal Antibody to Transferrin (TF/3001). Confirmation of Integrity and Purity of Antibody.



Protein Array

Image 2. Analysis of Protein Array containing >19,000 full-length human proteins using Transferrin Mouse Monoclonal Antibody (TF/3001) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (Monoclonal Antibody) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a Monoclonal Antibody to its intended target. A Monoclonal Antibody is considered to specific to its intended target, if the Monoclonal Antibody has an S-score of at least 2.5. For example, if a Monoclonal Antibody binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that Monoclonal Antibody to protein X is equal to 29.



Immunohistochemistry

Image 3. Formalin-fixed, paraffin-embedded human Prostate Carcinoma stained with Transferrin Mouse Monoclonal Antibody (TF/3001).