

36-3230: Anti-Transferrin (Early Marker of Oligodendrocytes) Monoclonal Antibody(Clone: TF/3001)

Clonality :	Monoclonal
Clone Name :	TF/3001
Application :	ELISA,IHC
Reactivity :	Human
Gene :	TF
Gene ID :	7018
Uniprot ID :	P02787
Alternative Name :	Apotransferrin; Beta-1 metal-binding globulin; Serotransferrin; Siderophilin; TF; TFQTL1; Transferrin
Isotype :	Mouse IgG1, kappa
Immunogen Information :	Recombinant fragment (around aa 311-445) of human TF protein (exact sequence is proprietary)

Description

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 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.

Product Info

Amount :	20 µg / 100 µg
Content :	200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage condition :	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.

Application Note

ELISA (Use Ab at 2-4ug/ml for coating) (Order Ab without BSA); Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes);

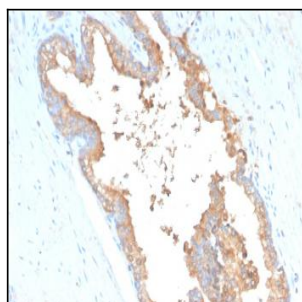


Fig. 1: Formalin-fixed, paraffin-embedded human Prostate Carcinoma stained with Transferrin Mouse Monoclonal Antibody (TF/3001).

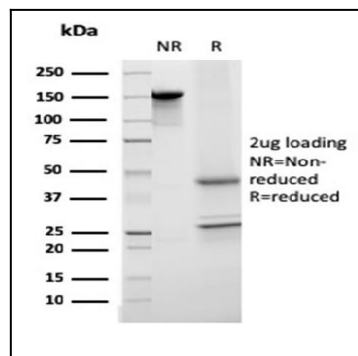


Fig. 2: SDS-PAGE Analysis Purified Monospecific Mouse Monoclonal Antibody to Transferrin (TF/3001). Confirmation of Integrity and Purity of Antibody.

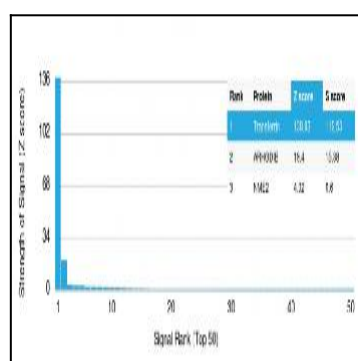


Fig. 3: Analysis of Protein Array containing >19,000 full-length human proteins using Transferrin Mouse Monoclonal Antibody (TF/3001) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (Monoclonal Antibody) (in combination with a fluorescently-tagged anti-IgG 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.