Datasheet for ABIN112497

anti-Transferrin antibody (N-Term)

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Overview

Quantity:	0.1 mg
Target:	Transferrin (TF)
Binding Specificity:	N-Term
Reactivity:	Human, Pig, Rabbit
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Transferrin antibody is un-conjugated
Application:	Western Blotting (WB), Immunoprecipitation (IP), Immunofluorescence (IF), Enzyme Immunoassay (EIA), Radioimmunoassay (RIA), Functional Studies (Func)

Product Details

Immunogen:	Purified Porcine Transferrin.
Clone:	HTF-14
Isotype:	IgG1
Specificity:	The antibody HTF-14 recognizes an epitope located in the N-terminal domain of human serum transferrin, a 77 kDa single polypeptide chain glycoprotein (member of the iron binding family of proteins). It is synthesised in the liver and consists of two domains each having a high affinity reversible binding site for Fe3+.
Cross-Reactivity (Details):	Species reactivity (expected):Porcine and Rabbit. Species reactivity (tested):Human.
Purification:	Precipitation Methods and Ion Exchange Chromatography

Target Details

Target:	Transferrin (TF)
Abstract:	TF Products
Background:	Transferrin is a monomeric glycoprotein of approximately 77 kDa, which serves as an iron-transporter. In normal plasma, transferrin has a concentration of 25-50 mmol / liter, and is usually about one-third saturated with iron, thus providing a large buffering capacity in case of an acute increase in plasma iron levels. Cells take up transferrin-iron complexes (holotransferrin) using transferrin receptor dimers. Upon binding of holotransferrin, the receptor is internalized by clathrin-mediated endocytosis. Acidification of endosomes by vesicular membrane proton pumps leads to dissociation of iron ions, whereas transferrin (apotransferrin) remains associated with its receptor (CD71) and recycles to the cell surface, where apotransferrin is released upon exposure to normal pH . Internalization of labeled transferrin thus represents an usefull approach to study endocytosis. Serum concentration rises in iron deficiency and pregnancy and falls in iron overload, infection and inflammatory conditions. Iron/transferrin complex is essential in haemoglobin synthesis and for certain types of cell division.Synonyms: Beta-1 metal-binding globulin, Serotransferrin, Siderophilin
Gene ID:	7018
NCBI Accession:	NP_001054
UniProt:	P02787
Pathways:	Transition Metal Ion Homeostasis

Application Details

Application Notes:	ELISA. RIA. Western Blotting. Immunocytochemistry. Functional Application: This antibody blocks binding of Transferrin to the Receptor. Immunohistochemistry on Paraffin Sections: 10 µ g/mL. Positive Control Tissue: Placenta. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Restrictions:	For Research Use only

Handling

Concentration:	1.0 mg/mL
Buffer:	Phosphate buffered saline (PBS), pH ~7.4, 15 mM Sodium Azide
Preservative:	Sodium azide

Handling

Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	Store undiluted at 2-8 °C for one month or (in aliquots) at -20 °C for longer.

Publications

Product cited in:	Laube, Heister, Scholz, Borchardt, Braun: "Re-programming of newt cardiomyocytes is induced by tissue regeneration." in: **Journal of cell science**, Vol. 119, Issue Pt 22, pp. 4719-29, (2007) (PubMed). Nováková, Dráberová, Schürmann, Czihak, Viklický, Dr-aber: "gamma-Tubulin redistribution in taxol-treated mitotic cells probed by monoclonal antibodies." in: **Cell motility and the cytoskeleton**, Vol. 33, Issue 1, pp. 38-51, (1996) (PubMed). Bártek, Viklický, Stratil: "Phylogenetically more conservative epitopes among monoclonal antibody-defined antigenic sites of human transferrin are involved in receptor binding." in: **British journal of haematology**, Vol. 59, Issue 3, pp. 435-41, (1985) (PubMed). Viklický, Dráber, Hasek, Bártek: "Production and characterization of a monoclonal antitubulin antibody." in: **Cell biology international reports**, Vol. 6, Issue 8, pp. 725-31, (1982) (PubMed).