

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects mouse Transferrin in direct ELISAs. Detects human Transferrin in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse plasma-derived Transferrin
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Transferrin (also serotransferrin and siderophilin) is a secreted, monomeric 78-82 kDa glycoprotein member of the transferrin family of molecules. It is synthesized by hepatocytes and serves as a transport vehicle for ferric iron, as well as cobalt and manganese ions. When bound to iron, transferrin is referred to as holo-transferrin (Greek: holo - meaning whole or together). When it is absent iron, it is called apotransferrin (Greek: apo - meaning away or apart). Apotransferrin encounters and binds two ferric iron atoms at the basolateral surface of duodenal epithelium. Here, as holo-transferrin, it circulates and distributes iron to virtually all tissues by binding to transferrin receptor 1. Once bound, holo-transferrin is internalized, iron is released, and the resulting apotransferrin is recycled. Mature mouse apotransferrin is 678 amino acids (aa) in length. It is bilobar in shape, with 330 aa N- and C-terminal lobes that each bind one ferric atom. In the absence of iron, each lobe is "open"; when iron is present, the lobes close, forming a compact structure. Mature mouse apotransferrin is 72% and 88% aa identical to human and rat apotransferrin, respectively.

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