

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Transferrin in direct ELISAs.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse plasma-derived Transferrin
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

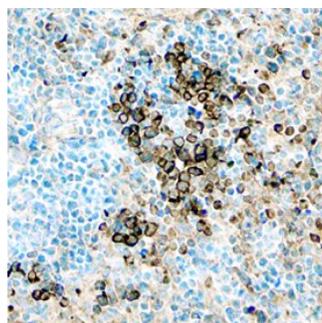
APPLICATIONS

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.

	Recommended Concentration	Sample
Immunohistochemistry	5-15 µg/mL	See Below

DATA

Immunohistochemistry



Transferrin in Mouse Thymus. Transferrin was detected in perfusion fixed frozen sections of mouse thymus using Goat Anti-Mouse Transferrin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3987) at 5 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to the plasma membranes of lymphocytes. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.