

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Nephronectin in ELISAs and Western blots.
Source	Monoclonal Mouse IgG _{2A} Clone # 859326
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Nephronectin Glu20-Arg565 Accession # Q6UXI9
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 either lyophilized or as a 0.2 µm filtered solution in PBS.

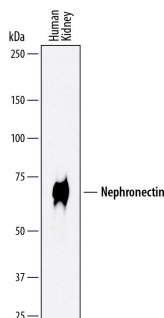
APPLICATIONS

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
Western Blot	2 µg/mL	See Below
Immunohistochemistry	1.7-25 µg/mL	See Below

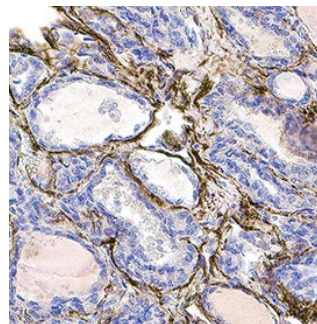
DATA

Western Blot



Detection of Human Nephronectin by Western Blot. Western blot shows lysates of human kidney tissue. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human Nephronectin Monoclonal Antibody (Catalog # MAB8025) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Nephronectin at approximately 70 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry



Nephronectin in Human Thyroid. Nephronectin was detected in immersion fixed frozen sections of human thyroid using Mouse Anti-Human Nephronectin Monoclonal Antibody (Catalog # MAB8025) at 1.7 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to extracellular connective tissue. Staining was performed using our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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

Nephronectin, also called POEM (preosteoblast EGF repeat protein with MAM domain) or EGFL6L, is a 70-90 kDa extracellular matrix protein that is a ligand for integrin α8β1 and mediates cell adhesion and spreading. The 565 amino acid (aa) human Nephronectin contains a 19 aa signal sequence, five EGF-like domains, a mucin-like region, an RGD integrin binding motif, and a MAM domain. Isoforms of 509-595 aa contain deletions of aa 387-416, and/or an insertion of 30 aa after aa 88, and/or substitution of 3 aa for aa 535-564. Mature human Nephronectin shares 88% and 89% aa sequence identity with mouse and rat Nephronectin, respectively. It is most highly expressed in developing endocrine organs such as parathyroid, thyroid, hypophysis and pineal organ, around developing bone, teeth, and muscle, and in the Wolffian duct and ureteric bud basement membranes in the developing kidney.