

## DESCRIPTION

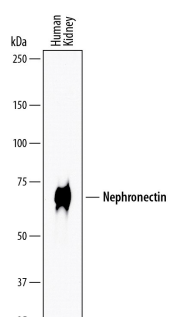
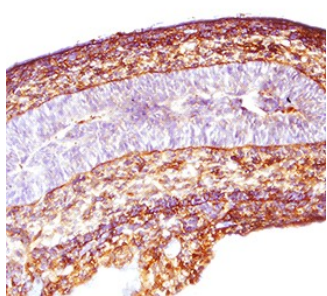
<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects human Nephronectin in ELISAs and Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 859326
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Chinese hamster ovary cell line CHO-derived recombinant human Nephronectin Glu20-Arg565 Accession # Q6UXI9
<b>Formulation</b>	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
<b>Western Blot</b>	2 µg/mL	See Below
<b>Immunohistochemistry</b>	5-25 µg/mL	See Below

## DATA

<p><b>Western Blot</b></p> 	<p><b>Detection of Human Nephronectin by Western Blot.</b> Western blot shows lysates of human kidney tissue. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human/Mouse 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.</p>	<p><b>Immunohistochemistry</b></p> 	<p><b>Nephronectin in Mouse Embryonic Intestine.</b> Nephronectin was detected in immersion fixed frozen sections of mouse embryonic intestine (13 d.p.c.) using Mouse Anti-Human/Mouse Nephronectin Monoclonal Antibody (Catalog # MAB8025) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to connective tissue. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.</p>
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## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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.