

## DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse Amnionless in direct ELISAs and Western blots. In direct ELISAs, approximately 10% cross-reactivity with recombinant human Amnionless is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Chinese hamster ovary cell line CHO-derived recombinant mouse Amnionless Ala20-Gly362 Accession # Q99JB7
<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 as a 0.2 µm filtered solution in PBS.

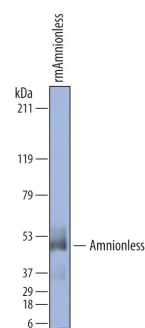
## APPLICATIONS

**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>	1 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below

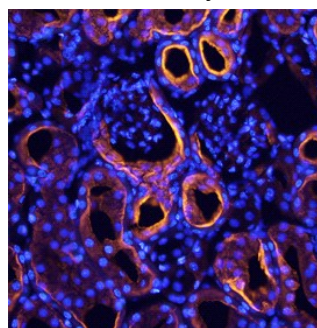
## DATA

### Western Blot



**Detection of Mouse Amnionless by Western Blot.** Western blot shows recombinant mouse Amnionless (10 ng/lane). PVDF membrane was probed with 1 µg/mL of Sheep Anti-Mouse Amnionless Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7139) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Amnionless at approximately 49 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

### Immunohistochemistry



**Amnionless in Mouse Kidney.** Amnionless was detected in perfusion fixed frozen sections of mouse kidney using Sheep Anti-Mouse Amnionless Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7139) at 15 µg/mL overnight at 4 °C. Tissue was stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to convoluted tubules. View our protocol for [Fluorescent IHC Staining of Frozen Tissue Sections](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 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

AMN (Amnionless) is a 45-49 kDa glycoprotein that is expressed by three cell types in mouse; extraembryonic visceral endoderm, proximal tubule renal epithelium, and absorption intestinal epithelium. AMN is required for gastrulation in rodent (but not human), and participates in Vitamin B12 absorption in the gut. In particular, AMN forms a membrane complex with Cubilin, promoting its proper orientation in the membrane and subsequent binding to the Intrinsic factor: VitB12 complex. Mature mouse AMN is a 439 amino acid (aa) type I transmembrane protein. It contains a 343 aa extracellular region (aa 20-362) that possesses one VWFC domain (aa 203-254), and a 75 aa cytoplasmic tail. In human, AMN may undergo cleavage to generate a 35 kDa soluble fragment. Over aa 20-362, mouse AMN shares 92% and 67% aa sequence identity with rat and human AMN, respectively.