

## DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse Uromodulin in direct ELISAs and Western blots. In direct ELISAs, 100% cross-reactivity with recombinant human Uromodulin is observed.
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> Clone # 774056
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse Uromodulin Ser24-Ala618 Accession # Q91X17
<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.

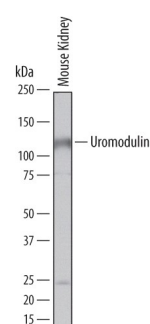
## APPLICATIONS

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.5 µg/mL	See Below
<b>Immunohistochemistry</b>	8-25 µg/mL	See Below

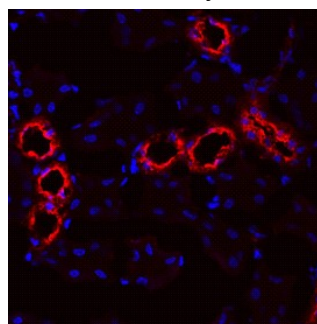
## DATA

### Western Blot



**Detection of Mouse Uromodulin by Western Blot.** Western blot shows lysates of mouse kidney tissue. PVDF membrane was probed with 0.5 µg/mL of Rat Anti-Mouse Uromodulin Monoclonal Antibody (Catalog # MAB5175) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). A specific band was detected for Uromodulin at approximately 115 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

### Immunohistochemistry



**Uromodulin in Mouse Kidney.** Uromodulin was detected in immersion fixed frozen sections of mouse kidney using Rat Anti-Mouse Uromodulin Monoclonal Antibody (Catalog # MAB5175) at 10 µg/mL overnight at 4 °C. Tissue was stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). Specific staining was localized to convoluted tubule epithelial cells. View our protocol for [Fluorescent IHC Staining of Frozen Tissue Sections](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 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

Uromodulin (also Tamm-Horsfall glycoprotein or THP) is a 105-120 kDa urinary glycoprotein. It is secreted by renal tubule epithelium, acts as a binding protein for IL-1, TNF-α and C1q, activates resting monocytes, and promotes neutrophil phagocytosis. Uromodulin forms high molecular weight oligomers that line the kidney tubules. Mouse Uromodulin is GPI-linked. Its precursor is 619 amino acids (aa) in length. It contains three EGF-like domains (aa 28-148), a ZP domain that mediates oligomerization (aa 335-590), and a cleavable C-terminal propeptide (aa 619-642). There are multiple splice variants. One shows an alternate start site at Met343, and there are two substitutions, a 17 aa substitution for aa 601-642, and a 166 aa substitution for aa 441-642. Over aa 25-618, mouse Uromodulin shares 78% and 89% aa identical to human and rat Uromodulin, respectively.