

DESCRIPTION	
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse Collectrin in direct ELISAs and Western blots. In direct ELISAs, approximately 40% cross-reactivity with recombinant human Collectrin is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse Collectrin Glu15-Ile144 Accession # Q9ESG4
<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.

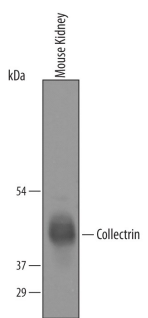
**APPLICATIONS**

**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>	1 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below
<b>Simple Western</b>	10 µg/mL	See Below

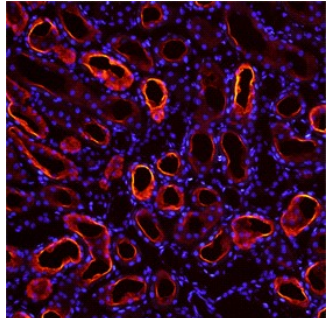
**DATA**

**Western Blot**



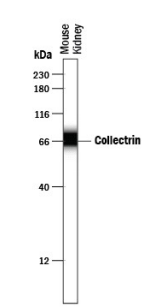
**Detection of Mouse Collectrin by Western Blot.** Western blot shows lysates of mouse kidney tissue. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Mouse Collectrin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4965) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Collectrin at approximately 43 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

**Immunohistochemistry**




**Collectrin in Mouse Kidney.** Collectrin was detected in perfusion fixed frozen sections of mouse kidney using Sheep Anti-Mouse Collectrin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4965) at 1.7 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](#).

**Simple Western**



**Detection of Mouse Collectrin by Simple Western™.** Simple Western lane view shows lysates of mouse kidney tissue, loaded at 0.2 mg/mL. A specific band was detected for Collectrin at approximately 69 kDa (as indicated) using 10 µg/mL of Sheep Anti-Mouse Collectrin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4965) followed by 1:50 dilution of HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<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**

Collectrin (also Transmembrane protein 27) is a 37-43 kDa member of the MEM27 family of proteins. It is expressed on pancreatic  $\beta$ -cells where it regulates insulin secretion, and on renal tubular epithelium where it mediates amino acid transport. Mature mouse Collectrin is a 208 amino acid (aa) type I transmembrane glycoprotein. It contains a 127 aa extracellular region (aa 15-141) and a 60 aa cytoplasmic domain (aa 163-222). Collectrin dimerizes on the cell surface, and undergoes proteolytic cleavage to generate a 26 kDa soluble fragment. Over aa 15-144, mouse Collectrin shares 92% and 86% aa identity with rat and human Collectrin, respectively.