

DESCRIPTION	
Species Reactivity	Mouse
Specificity	Detects mouse Collectrin in direct ELISAs and Western blots. In direct ELISAs, approximately 40% cross-reactivity with recombinant human Collectrin is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Collectrin Glu15-Ile144 Accession # Q9ESG4
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 as a 0.2 µm filtered solution in PBS.

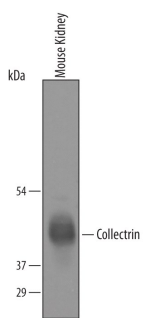
APPLICATIONS

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	1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below
Simple Western	10 µg/mL	See Below

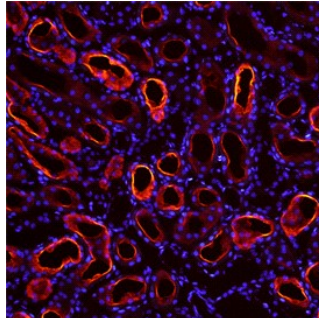
DATA

Western Blot



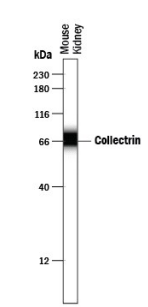
Detection of Mouse Collectrin by Western Blot. Western blot shows lysates of mouse kidney tissue. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Mouse Collectrin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4965) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # 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

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
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

Collectrin (also Transmembrane protein 27) is a 37-43 kDa member of the MEM27 family of proteins. It is expressed on pancreatic β -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.