

## DESCRIPTION

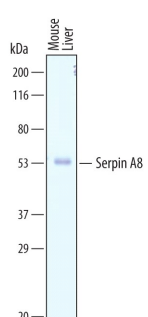
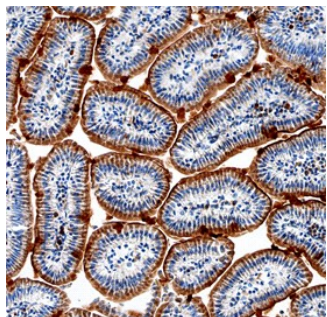
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse Serpin A8/Angiotensinogen in direct ELISAs and Western blots. In direct ELISAs, approximately 24% cross-reactivity with recombinant human Angiotensinogen is observed, and less than 1% cross-reactivity with recombinant mouse (rm) Serpin A1, rmSerpin C1, and rmSerpin F2 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 Serpin A8/Angiotensinogen Asp25-Val477 Accession # AAH19496
<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

## DATA

<p><b>Western Blot</b></p>  <p><b>Detection of Mouse Serpin A8/Angiotensinogen by Western Blot.</b> Western blot shows lysates of mouse liver tissue. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Mouse Serpin A8/Angiotensinogen Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6966) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Serpin A8/Angiotensinogen at approximately 55 kDa (as indicated). This experiment was conducted under reducing conditions and using <a href="#">Immunoblot Buffer Group 8</a>.</p>	<p><b>Immunohistochemistry</b></p>  <p><b>Serpin A8/Angiotensinogen in Mouse Intestine.</b> Serpin A8/Angiotensinogen was detected in perfusion fixed frozen sections of mouse intestine using Sheep Anti-Mouse Serpin A8/Angiotensinogen Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6966) at 1.7 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Sheep HRP-DAB Cell &amp; Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to the brush border in intestinal epithelium. View our protocol for <a href="#">Chromogenic IHC Staining of Frozen Tissue Sections</a>.</p>
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## 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

Serpin A8 (serine proteinase inhibitor-clade A8; also angiotensinogen) is a secreted, 52-62 kDa glycoprotein member of the clade F-subfamily, serpin superfamily of protease inhibitors. It is expressed by neurons and hepatocytes, and undergoes extracellular cleavage by renin to create a ten amino acid (aa) peptide termed Ang/angiotensin I. This inactive peptide is further cleaved by ACE on the endothelial cell membrane to create bioactive Ang II and III. Ang II induces vasoconstriction and aldosterone release by acting on AT1 receptors, while Ang III drives aldosterone release. Ang I can be further processed by MME to generate Ang, a peptide that binds MAS1 on platelets, and promotes the release of NO, an antithrombotic agent. Mature mouse angiotensinogen is 453 aa in length (aa 25-477). It contains Ang I (aa 25-34) that is cleaved to create Ang II (aa 25-32), Ang III (aa 26-32) and Ang I (aa 25-31). Serpin A8/Angiotensinogen may circulate in a 200 kDa complex with major basic protein (MBP), or as part of a larger 300 kDa complex with MBP and complement C3dg. There is an alternative start site five aa upstream of the standard site. Over aa 25-477, mouse serpin A8 shares 86% and 61% aa identity with rat and human serpin A8, respectively.