

## DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse Angiotensin-3 in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human (rh) Angiotensin-2 or rhAngiotensin-3 was observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant mouse Angiotensin-3
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the antibody by the LAL method.
<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.

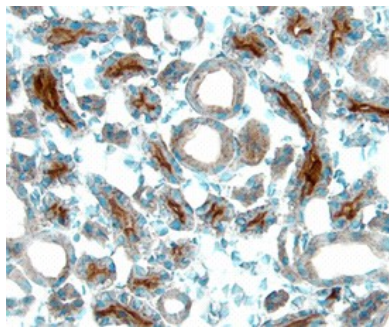
## APPLICATIONS

**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>	0.1 µg/mL	Recombinant Mouse Angiotensin-3 (Catalog # 738-AN)
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below

## DATA

### Immunohistochemistry



**Angiotensin-3 in Rat Kidney.**  
Angiotensin-3 was detected in perfusion fixed frozen sections of rat kidney using 5 µg/mL Goat Anti-Mouse Angiotensin-3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF738) overnight at 4 °C. Tissue was stained with the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

## 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

Mouse angiotensin-3 (Ang-3) (1), is a secreted glycoprotein belonging to the angiotensin family. It has the characteristic structural motifs of angiotensins including the coiled-coiled domain near the amino-terminus and a fibrinogen-like domain at the C-terminus. Mouse Ang-3 cDNA encodes a 509 amino acid (aa) precursor protein with a 21 aa signal peptide. It shares 47%, 46%, and 54% aa sequence identity with mouse Ang-1, mouse Ang-2, and human Ang-4, respectively. Although the sequence homology is much higher between the human and mouse counterparts for Ang-1 (97%) and Ang-2 (85%), mouse Ang-3 is believed to be an ortholog of human Ang-4 based on chromosomal localization studies (1, 2). Human Ang-4 is highly expressed in lung and in cultured human umbilical vein endothelial cells (HUVECs). In contrast, mouse Ang-3 is expressed in multiple mouse tissues. Human ANG-4 is an agonist that can bind and activate Tie-2, a receptor tyrosine kinase with immunoglobulin and epidermal growth factor homology domains expressed primarily on endothelial cells and early hematopoietic cells (2, 3). Mouse Ang-3 has been reported to be a Tie-2 antagonist. It is likely that mouse Ang-3, like Ang-2, may exert agonist or antagonist activities depending on the cell context (1, 3, 4).

### References:

1. Valenzuela, D.M. *et al.* (1999) *Proc. Natl. Acad. Sci. USA* **96**:1904.
2. Nishimura, M. *et al.* (1999) *FEBS Lett.* **448**:254.
3. Jones, N. *et al.* (2001) *Nat. Rev. Mol. Cell Biol.* **2**:257.
4. Teichert-Kuliszewska, K. *et al.* (2001) *Cardiovasc. Res.* **49**:659.