Supplemental Table 1

Time-dependent effects of captopril treatment (150 mg captopril/kg/d) on left ventricle (LV) interstitial fluid (ISF) Ang II and chymase activity in conscious mice.

Captopril treatment period (days)	n	LV ISF Ang II (pg/hr)	LV ISF chymase activity (pg Ang II formed/hr)
0	5	0.45 ± 0.03	0.19 ± 0.06
1	8	0.65 ± 0.11	0.98 ± 0.16[a]
5	5	0.63 ± 0.16	1.07 ± 0.1[b]
9	8	0.42 ± 0.14	1.00 ± 0.26[c]
14	6	0.44 ± 0.14	1.23 ± 0.33[c]

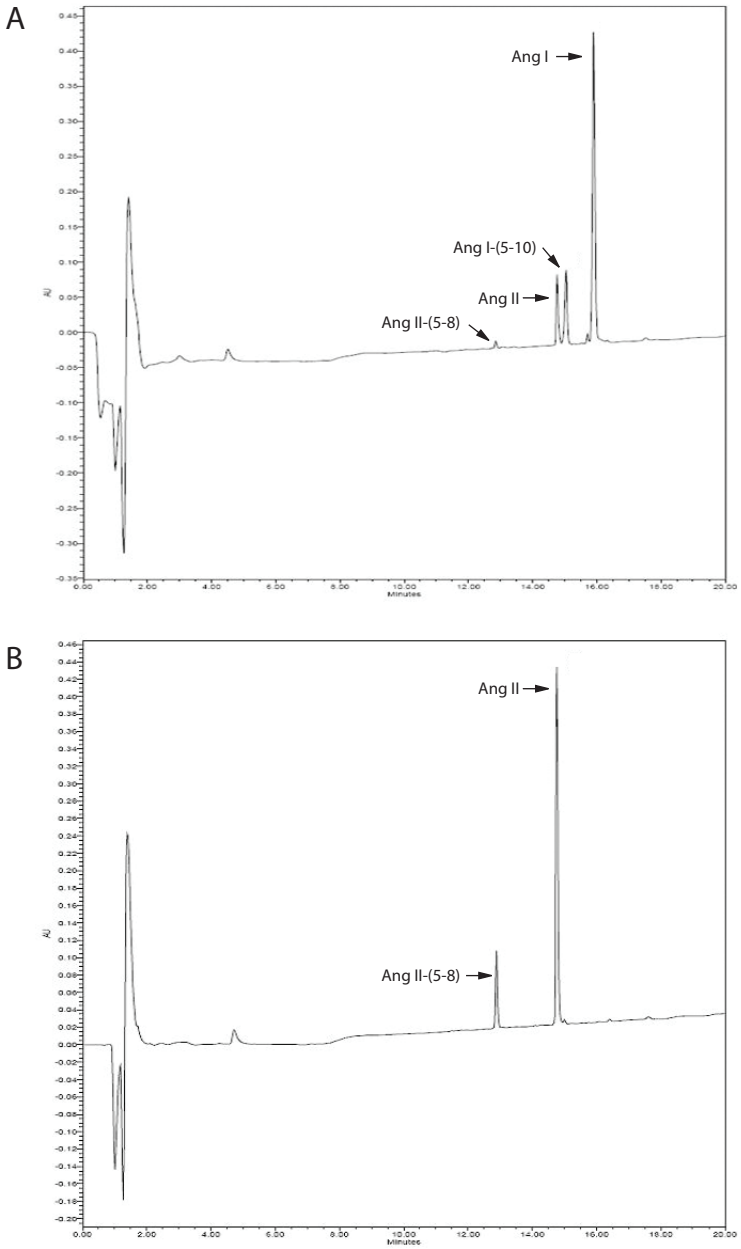
[a]$P < 0.01$ compared to 0-day control. [b]$P < 0.001$ compared to 0-day control. [c]$P < 0.05$ compared to 0-day control. Values are mean ± SEM.

Supplemental Table 2

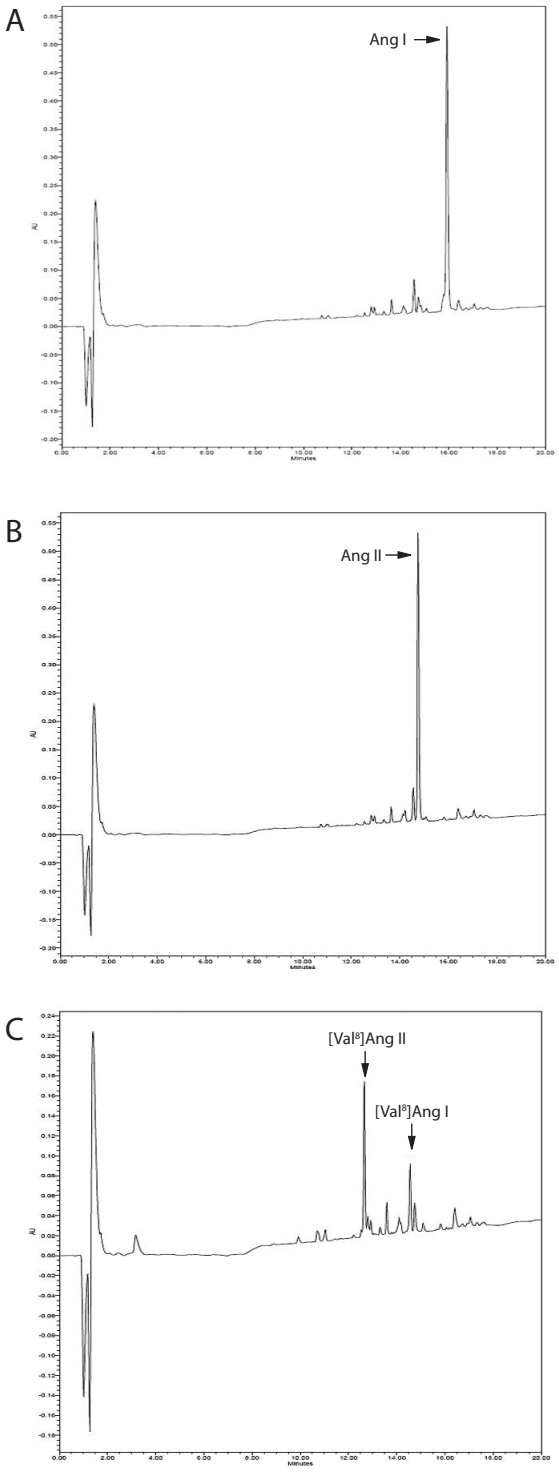
Effects of ACE (10 mg temocapril/kg/d) and chymase (100 mg CI-B/kg/d) inhibitors, and their combination (10 mg temocapril/kg/d plus 100 mg CI-B/kg/d) on mean arterial blood pressure (MBP) and heart rate in hamsters after 5 weeks of myocardial infarction (MI).

Treatment group	n	MBP (mm Hg)	Heart rate (bpm)
Sham control	10	62 ± 5	385 ± 15
MI	16	64 ± 4	389 ± 8
MI + ACE inhibitor	12	66 ± 4	395 ± 13
MI + chymase inhibitor	9	67 ± 5	399 ± 10
MI + ACE and chymase inhibitors	11	72 ± 5	371 ± 6
P value		0.65	0.70

Values are means ± SEM. *P* values are from ANOVA and show that differences in MAB and heart rate between treatment groups were not significant.



Supplemental Figure 1. Metabolism of Ang I and Ang II by MMCP4. (A) A representative HPLC chromatogram showing cleavage by MMCP4 of Ang I (DRVYIHPFHL) which yields the fragments Ang II-(5–8), Ang II, Ang I-(5–10), and Ang II-(1–4). (B) A representative HPLC chromatogram showing cleavage by MMCP4 of Ang II (DRVYIHPF) which yields the fragments Ang II-(1–4) and Ang II-(5–8). The retention times of the substrates and products were ascertained using pure synthetic standards. However, in the case of HL and Ang II-(1–4) the peptide products were too hydrophilic and eluted at a retention time associated with the injection artifact that occurred between 0.4 and 2 minutes; in this case their elution positions are not shown. MMCP4 concentration and incubation time were adjusted to obtain approximately 30% cleavage of the substrate.



Supplemental Figure 2. Metabolism of Ang I, Ang II and [Val^8]Ang I by MMCP5. Representative HPLC chromatograms showing that MMCP5 does not cleave Ang I (DRVYIHPFHL) (A) or Ang II (DRVYIHPF) (B). In these incubations the concentration of MMCP5 was relatively high which resulted in multiple small OD peaks of unknown identity that were also seen in the enzyme only control (not shown here). (C) A representative HPLC chromatogram showing cleavage by MMCP5 of [Val^8]Ang I (DRVYIHPVHL) which yields the fragments HL and [Val^8]Ang II. The retention times of the substrates and products were ascertained using pure synthetic standards. However, in the case of HL the dipeptide product was too hydrophilic and eluted at a retention time associated with the injection artifact that occurred between 0.4 and 2 minutes; in this case its elution position is not shown. In (C) MMCP5 concentration and incubation time were adjusted to obtain approximately 60% cleavage of the substrate to more clearly identify the products formed.