

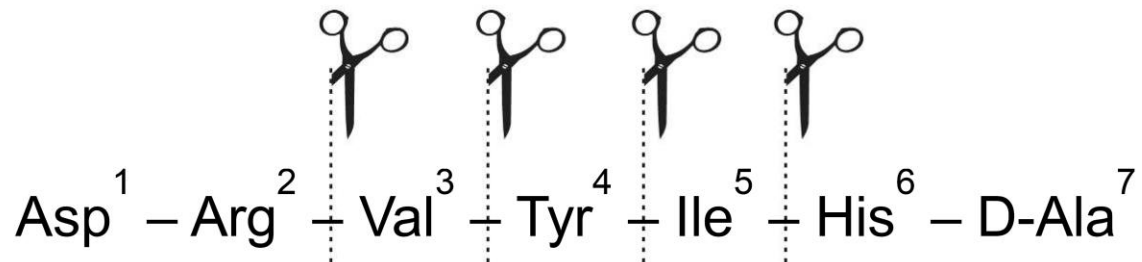
SUPPLEMENTARY DATA

**Supplementary Table S1. Peptides generated after incubation of A779 with neprilysin for up to 48 hours.**

	<b>0 h</b>	<b>24 h</b>	<b>48 h</b>
A779-(1-7)	100	7.2	0
A779-(1-2)	0	12.8	22.0
A779-(1-3)	0	0.6	0.2
A779-(1-4)	0	5.9	3.1
A779-(3-4)	0	18.5	23.3
A779-(4-7)	0	0.6	0.1
A779-(5-7)	0	53.9	50.8
A779-(6-7)	0	0.5	0.5
Data are extraction ion current (EIC) areas for each peptide expressed as percent of total ion count.			

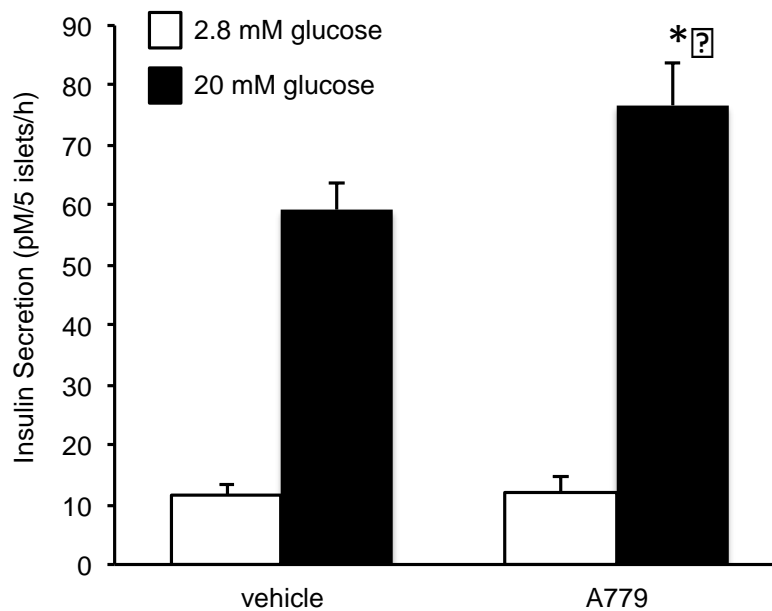
SUPPLEMENTARY DATA

**Supplementary Figure S1. Neprilysin cleaves A779 at four sites.**



SUPPLEMENTARY DATA

**Supplementary Figure S2. The MasR antagonist, A779, promotes insulin secretion in islets expressing neprilysin.** Insulin secretion in response to 2.8 mM or 20 mM glucose from C57BL/6.NEP<sup>+/+</sup> islets after 48-hour culture in the absence or presence of 1  $\mu$ M A779. Data are mean  $\pm$  SEM. \*p<0.05 vs vehicle; n=11.



SUPPLEMENTARY DATA

**Supplementary Figure S3. Short-term exposure to Ang-(1-7) or Ang-(1-2) does not potentiate GSIS.** Insulin secretion from C57BL/6.NEP<sup>+/+</sup> (A; n=6) and C57BL/6.NEP<sup>-/-</sup> (B; n=6) islets in response to 1-hour exposure to 2.8 mM or 20 mM glucose in the absence or presence of 1 nM angiotensin-(1-7) or 1 nM angiotensin-(1-2). Data are mean  $\pm$  SEM.

