SUPPLEMENTARY LEGEND FIGURES

**IDENTIFICATION OF AN ANGIOTENSIN-(1-7)-PRODUCING FUSION PROTEIN IN THE BRAIN OF TRANSGENIC RATS REVEALS A HYPOTENSIVE EFFECT MEDIATED THROUGH MODULATION OF THE GABA–nNOS–NO PATHWAY AND HIGHLIGHTING ASTROCYTE–NEURON CROSSTALK.**

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Short Title: An Angiotensin-(1-7)-producing fusion protein in the brain of transgenic rats

**Figure S1.** Cell-specific localization of transgenic Ang-(1-7) mRNA in the hypothalamus, medulla, supraoptic nucleus and cortex of adult TG7371 rats. Representative images showing the localization of transgenic Ang-(1-7) mRNA (mRNA IgG2b, red) in GFAP positive cells (green) in the hypothalamus and medulla (**A**) and NeuN- and SOX-positive cells (green; yellow arrow) in the supraoptic nucleus (**B**) and cortex (**C**). DAPI (blue) was used as a counterstaining to show nuclei. Scale bar = 100 and 20 µm, Zeiss Confocal LSM 700 and 980 images.

**Figure S2.** Cell-specific localization of Ang-(1-7) fusion protein in the nucleus tractus solitarius (NTS) of adult TG7371 rats. Co-localization of the Ang-(1-7) fusion protein (IgG2b, red) in cells expressing SOX10 (green; enlarged view at right). DAPI (blue) was used as a counterstaining to show nuclei. Scale bar = 20 µm, Zeiss Confocal LSM 700 images. Coronal sections = 40 µm.

**Figure S3.** Staining disappeared in adjacent coronal sections incubated without primary antibody in the nucleus ambiguous (NA) and rostral ventrolateral medulla (RVLM) of TG7371. Ang-(1-7) fusion protein-negative cells in the brain of the TG737, enlarged view at right, the nuclear marker, DAPI, is shown in blue. Images (x2 and x10) BZ-9000 fluorescence microscope. Scale bar = 300 µm and 50 µm.

**Figure S4.** Representative images showing Ang-(1-7) fusion protein immunofluorescence in the striatum of TG7371. The immunoreactivity for fusion protein, anti-IgG2b, is shown in red, the nuclear marker, DAPI, is shown in blue. (**A**) Ang-(1-7) fusion protein-negative cells in the paraventricular nucleus (PVN) of the TG7371 (enlarged view at right) and (**B**) Ang-(1-7) fusion protein-positive cells in the striatum of the TG7371 (enlarged view at right). Images (x2 and x20) BZ-9000 fluorescence microscope. Scale bar = 300 µm and 30 µm.