

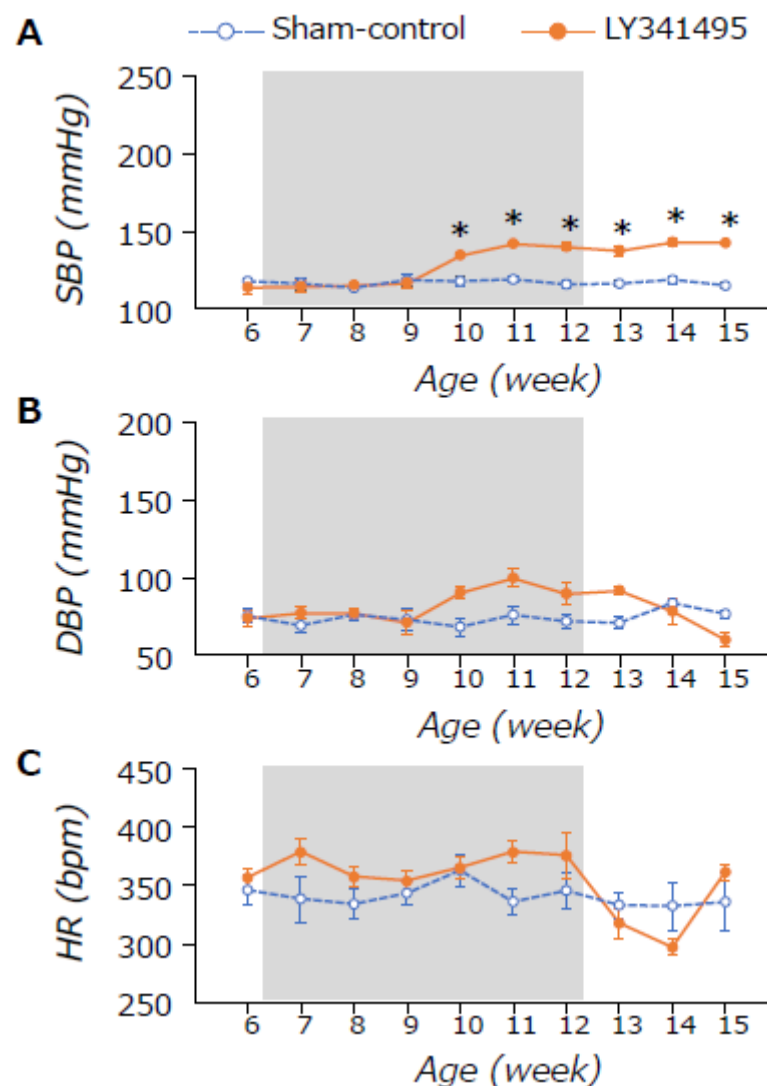
Article

# Loss of Group II Metabotropic Glutamate Receptor Signaling Exacerbates Hypertension in Spontaneously Hypertensive Rats

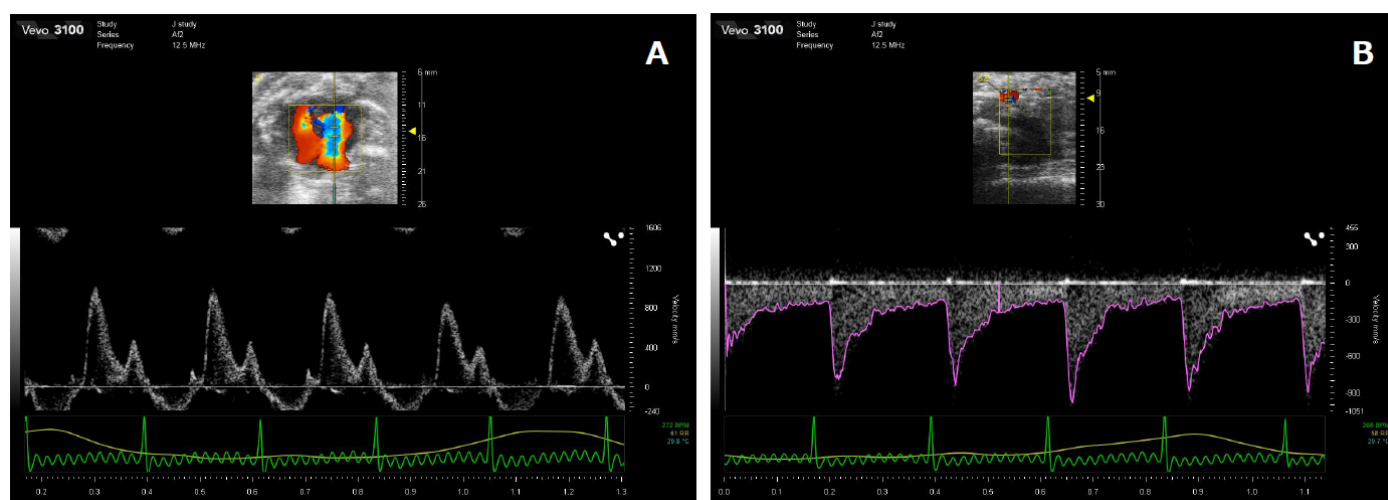
Julia Chu-Ning Hsu <sup>1</sup>, Shin-ichi Sekizawa <sup>1\*</sup>, Ryota Tochinnai <sup>1</sup> and Masayoshi Kuwahara <sup>1\*</sup>

<sup>1</sup> Department of Veterinary Pathophysiology and Animal Health, Graduate School of Agricultural and Sciences, The University of Tokyo, Tokyo 113-8654, Japan

\* Correspondence: akuwam@mail.ecc.u-tokyo.ac.jp (M.K.), a-ssekiz@mail.ecc.u-tokyo.ac.jp (S.S.)



**Figure S1.** Time course changes of SBP (A), DBP (B) and HR (C) measured in Wistar Kyoto rats. LY341495 treatment (shaded area) was given between the age of 6 and 12 weeks. The treatment slightly increased SBP from the middle of the antagonist treatment (two-way repeated measures ANOVA: treatment,  $p < 0.001$ ; time,  $p < 0.001$ ; interaction,  $p < 0.001$ ), suggesting loss of group II mGluR signaling has a similar effect on blood pressure regulation regardless of the normotensive/hypertensive condition. (DBP: treatment,  $p = 0.001$ ; time,  $p = 0.023$ ; interaction,  $p = 0.002$ ) (HR: treatment,  $p = 0.221$ ; time,  $p = 0.002$ ; interaction,  $p = 0.052$ ) \* $P < 0.05$ ; statistical evaluations were performed using two-way repeated measures ANOVA followed by Tukey's HSD *post hoc* test. Data for each group are the mean  $\pm$  SEM from five rats.



**Figure S2.** Recording images from echocardiography and renal ultrasonography. The left panel shows a color doppler view of mitral flow and its velocity (A) and the right panel shows a color doppler image of renal artery and its systolic velocity (B).