

Pepcan-12 (RVD-hemopressin) is a CB2 receptor positive allosteric modulator constitutively secreted by adrenals and in liver upon tissue damage

Vanessa Petrucci^{1#}, Andrea Chicca^{1#}, Sandra Glasmacher¹, Janos Paloczi², Zongxian Cao²,
Pal Pacher², Jürg Gertsch^{1*}

¹Institute of Biochemistry and Molecular Medicine, University of Bern, Bülhlstrasse 28, 3012
Bern, Switzerland

²Laboratory of Cardiovascular Physiology and Tissue Injury, National Institutes of
Health/NIAAA, Bethesda, MD, USA

Supplementary Figure S1.
Effect of pepcans on CB2 receptor signaling in absence of agonist.

Supplementary Figure S2.
Effect of N-terminally extended pepcans on CB2 receptor-mediated cAMP production.

Supplementary Figure S3.
Effect of pepcan-12 on CB2 receptor-mediated beta-arrestin recruitment by CP55.940.

Supplementary Figure S4.
cELISA quantification of pepcans in LPS-stimulated versus normal (saline) Swiss albino female mice.

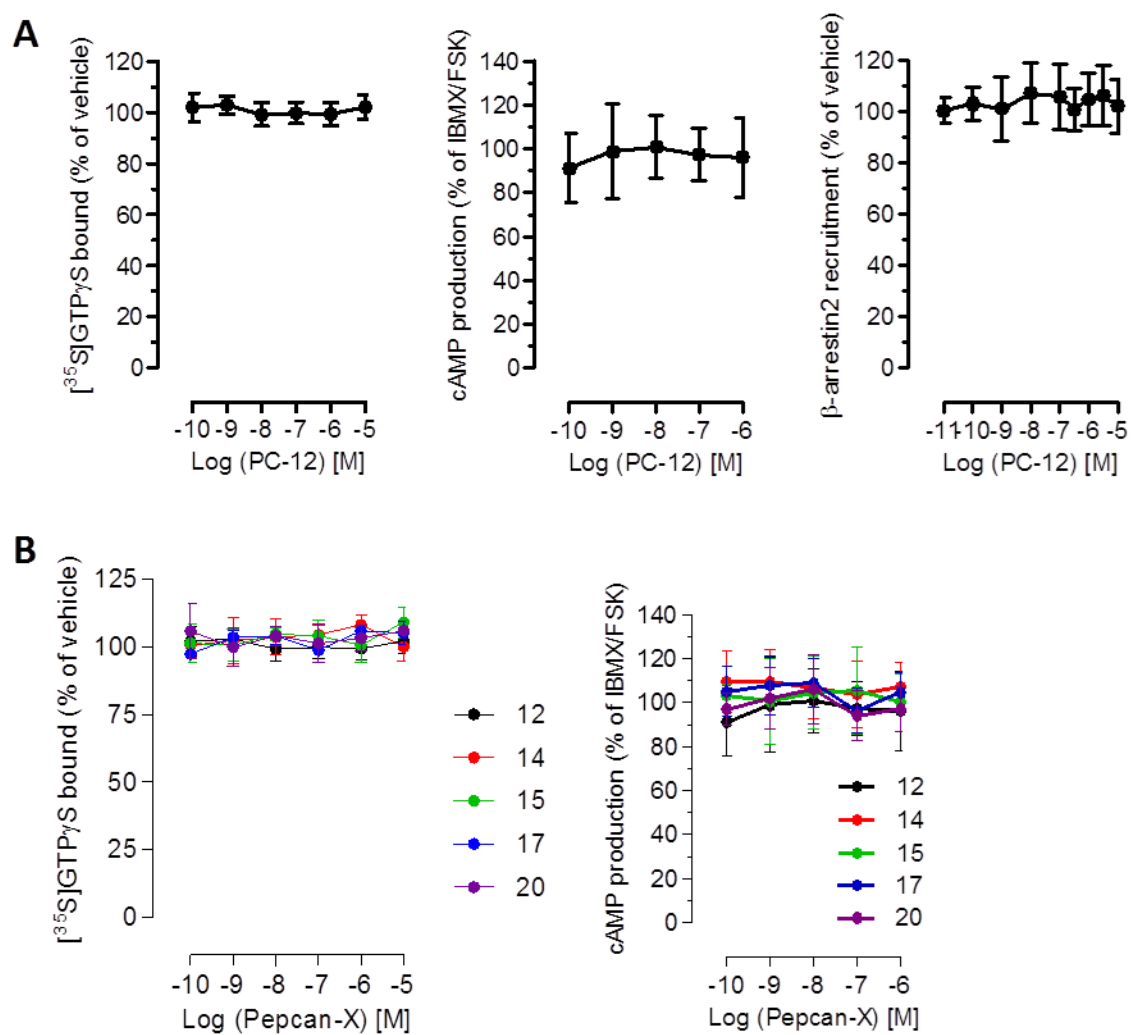


Figure S1. Effect of pepcans on CB2 receptor signaling in absence of agonist. (A) No effect was observed by pepcan-12 on [³⁵S]GTP_γS binding, cAMP levels or β-arrestin2 recruitment. (B) Lack of effects of pepcans -14,-15,-17 and -20 on CB2 receptor-mediated [³⁵S]GTP_γS binding and cAMP levels. Data show mean values ± SD of at least 3 independent experiments each performed in triplicates.

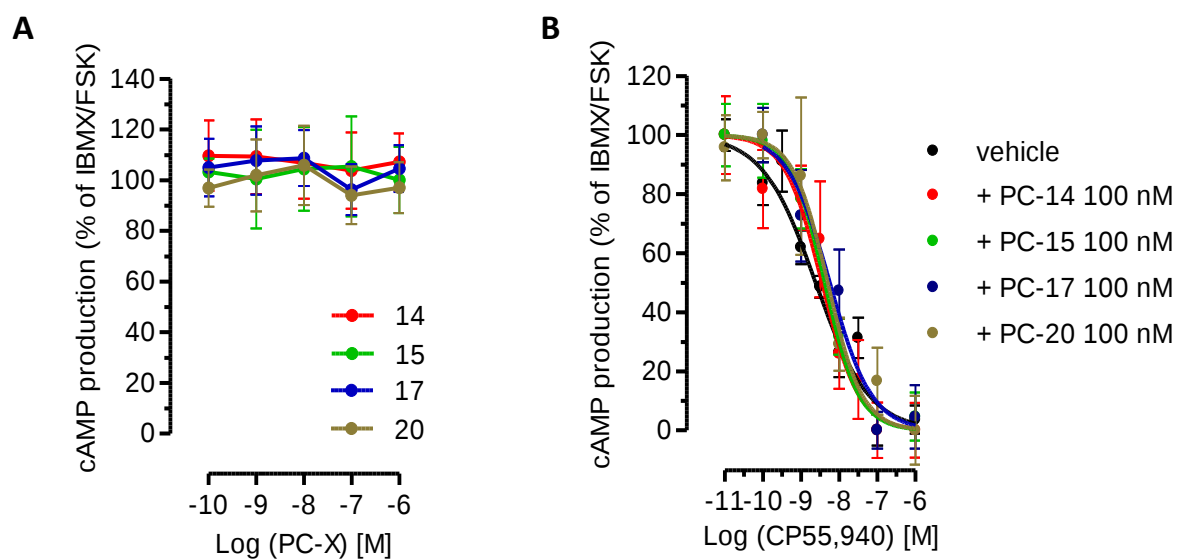


Figure S2. Effect of N-terminally extended pepcans on CB2 receptor-mediated cAMP production. (A) Effect of pepcans -14,-15,-17 and -20 on stimulated cAMP production in absence of a CB2 agonist. (B) Effects of pepcans -14,-15,-17 and -20 on CB2 receptor-mediated binding cAMP levels in presence of various concentrations of CP55,940. Data show mean values $\pm$ SD of at least 3 independent experiments each performed in triplicates.

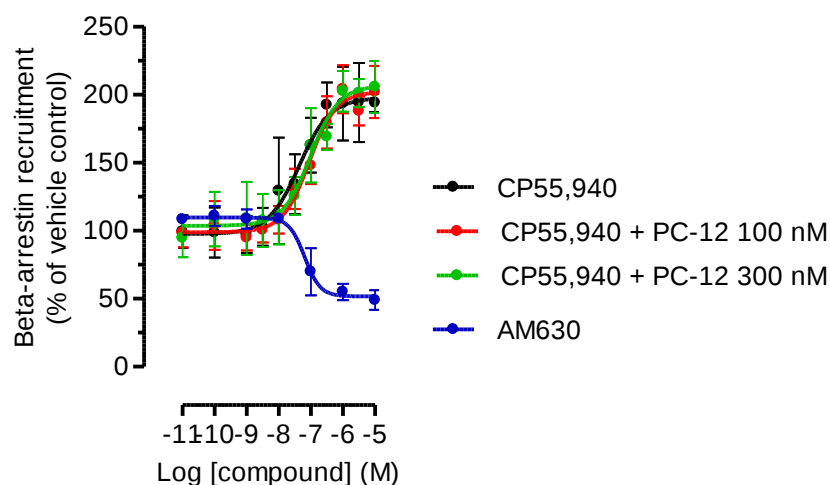


Figure S3. Effect of pepcan-12 on CB2 receptor-mediated beta-arrestin recruitment by CP55.940. Data show mean values $\pm$ SD of at least 3 independent experiments each performed in triplicates.

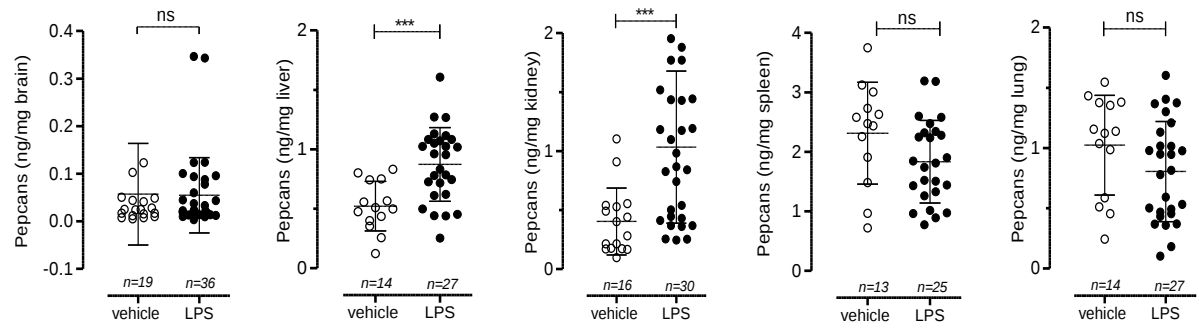


Figure S4. cELISA quantification of pepcans in LPS-stimulated versus normal (saline) Swiss albino female mice. Swiss albino mice (females, 8 weeks old) were injected intraperitoneally (i.p.) with LPS (5 mg/kg) and sacrificed after 2 h. Groups were compared using two-tailed t-Student's; $p < 0.0001$; ns= not significant.