

Repeated social defeat enhances CaCl₂-induced abdominal aortic aneurysm expansion by inhibiting the early fibrotic response via the MAPK-MKP-1 pathway

Supplementary Figure Legends

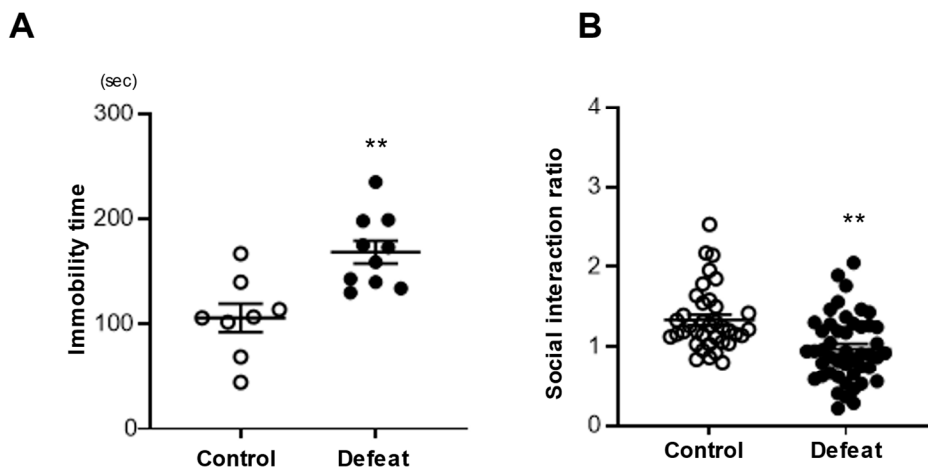


Figure S1. Analysis of depression-like behaviors.

(A) Tail suspension test. Values represent the mean \pm standard error of the mean (SEM) for eight non-exposed mice and ten RSD-exposed mice before CaCl₂ application. $**p < 0.01$ vs. non-exposed mice; Student's t-test. **(B)** Social interaction test. Values represent mean \pm standard error of mean (SEM) for 37 non-exposed mice and 47 RSD-exposed mice before CaCl₂ application. $**p < 0.01$ vs. non-exposed mice; Student's t-test. RSD, repeated social stress.

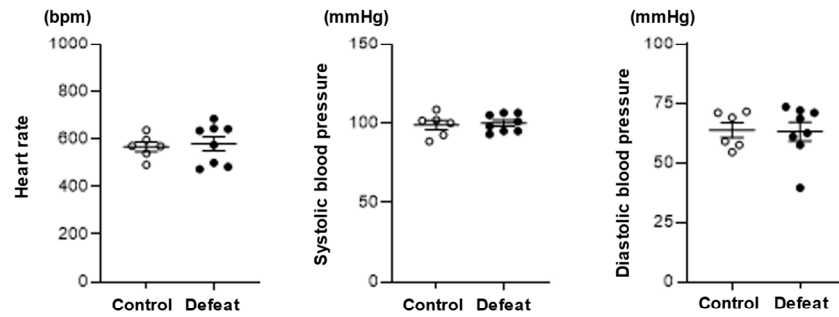


Figure S2. Body weight and hemodynamic parameters before CaCl_2 application are comparable between the two groups. Body weight, blood pressure, and heart rate are equivalent between the two groups. Values are mean \pm SEM for six control and eight defeated mice. Control: undefeated control mice. Defeat: defeated mice.

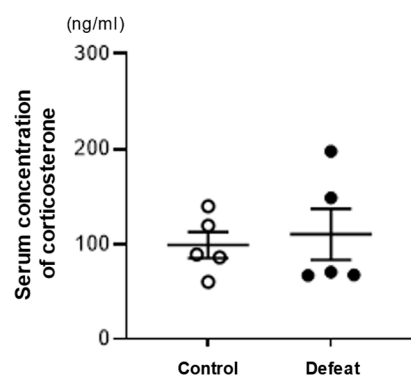


Figure S3. Serum concentrations of corticosterone. Values are mean \pm SEM for five control and five defeated mice. Control: undefeated control mice. Defeat: defeated mice.

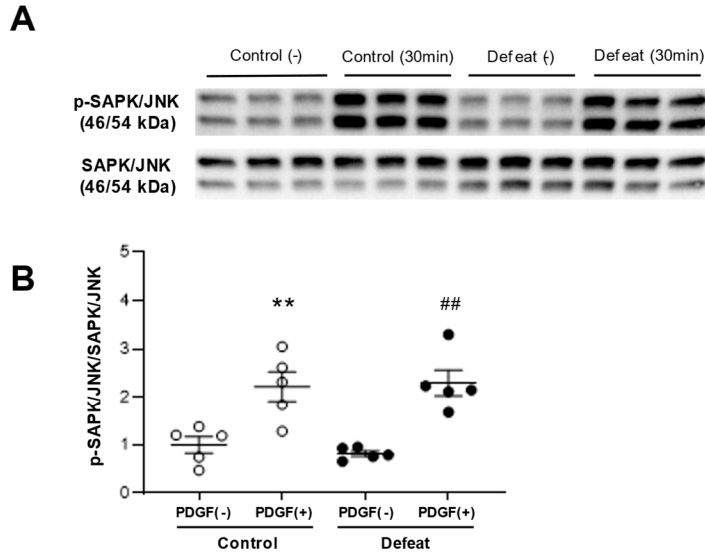
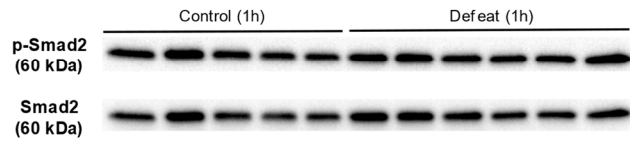


Figure S4. Repeated social defeat does not affect PDGF-induced JNK phosphorylation in primary cultured VSMCs. (A and B) Representative Western blot of JNK phosphorylation in VSMCs at 30 min after PDGF stimulation and a quantitative analysis of the protein expression. Values are the mean \pm SEM for five control and five defeated mice. ** $p < 0.01$ vs. control without PDGF stimulation. ## $p < 0.01$ vs. defeat without PDGF stimulation; two-way repeated measures ANOVA with the Tukey–Kramer post hoc test.

A



B

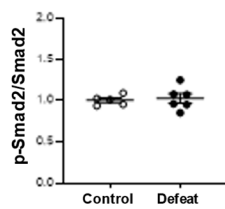


Figure S5. Repeated social defeat does not affect TGF- β -induced Smad2 phosphorylation in primary cultured VSMCs. (A and B) Representative Western blot of Smad2 phosphorylation in VSMCs at 60 min after TGF- β stimulation and a quantitative analysis of the protein expression. Values are the mean \pm SEM for five control and five defeated mice.

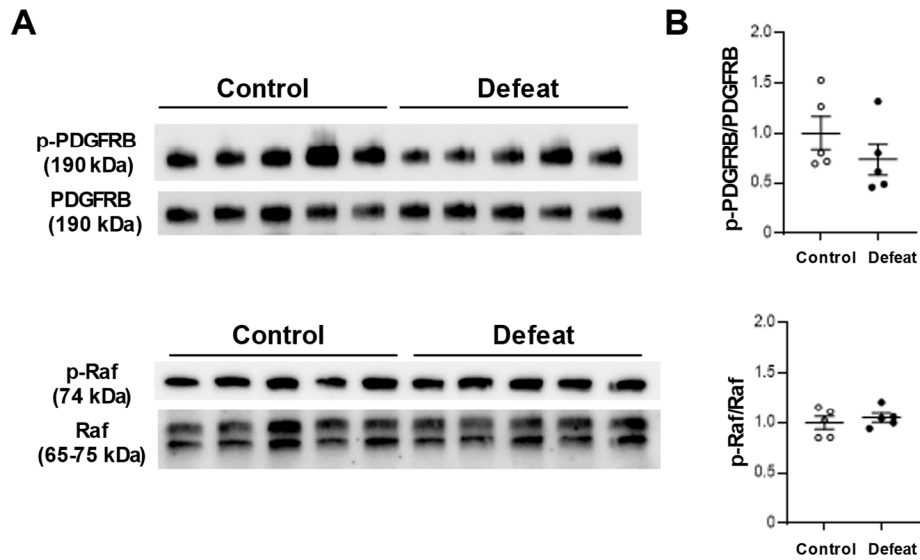


Figure S6. Repeated social defeat does not affect PDGF-induced phosphorylation of PDGFRB and Raf in primary cultured VSMCs. (A and B) Representative Western blot of the phosphorylation of platelet derived growth factor receptor β (PDGFRB) and Raf in VSMCs at 30 min after PDGF stimulation and a quantitative analysis of the protein expression. Values are the mean \pm SEM for five control and five defeated mice.

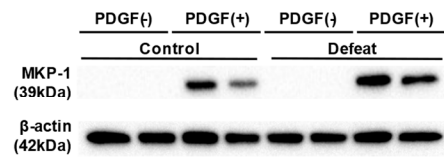


Figure S7. MKP-1 protein expression before PDGF stimulation. Representative Western blot of MKP-1 in VSMCs before and after PDGF stimulation.