Supplementary information

Activation of GPR35 protects against cerebral ischemia by recruiting monocyte-derived macrophages

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Results

Figure 1: Effect of PA on pAkt and pGSK-3β 48 h after the MCAO.

A. Phospho-Akt concentration was unaffected in the ischemic brain upon pamoic acid treatment at 48 h after the MCAO. The One-Way ANOVA, P>0.05 (Bonferroni multiple comparison test), values are means±s.e.m, n=4. B. PA treatment significantly increased the phosphorylation of GSK-3β after 48 h of MCAO. One-Way ANOVA, F(2/13)=4.769, *P=0.0284 (Bonferroni multiple comparison test), values are means±s.e.m, n=5.
Figure 2: PA treatment reduces oxidative stress in the ischemic hemisphere 48 h after the MCAO.

A. PA treatment reduced the nitric oxide concentration in the ischemic hemisphere 48 h after the MCAO. The One-Way ANOVA, $F_{(2/12)}=5.53$, *$P=0.0364$ to 0.0464 (Bonferroni multiple comparison test), values are means±s.e.m, n=5. B. PA treatment increased autoxidation inhibition in the ischemic hemisphere 48 h after the MCAO. The One-Way ANOVA, $F_{(2/12)}=10.56$, **$P=0.0040$ to 0.0083 (Bonferroni multiple comparison tests), values are means±s.e.m, (n for Sham =4, n for MCAO= 5, n for MCAO+PA=6). C. PA treatment reduced
myeloperoxidase (MPO) activity in the ischemic hemisphere 48 h after the MCAO. The One-Way ANOVA, F_{(2/11)}=16.16, **P=0.0048, ***P=0.0005 (Bonferroni multiple comparison test), values are means±s.e.m, (n for Sham =4, n for MCAO= 4, n for MCAO+PA=6).

D. PA treatment increased the catalase activity in the ischemic hemisphere 48 h after the MCAO. The One-Way ANOVA, F_{(2/12)}=6.875, *P=0.0214, (Bonferroni multiple comparison test), values are means±s.e.m, n=5.

E. PA treatment increased the GSH activity in the ischemic hemisphere 48 h after the MCAO. The One-Way ANOVA, F_{(2/17)}=9.232, *P=0.0484, **P=0.0019 (Bonferroni multiple comparison test), values are means±s.e.m, (n for Sham =6, n for MCAO= 8, n for MCAO+PA=6).

F. PA treatment The effect of PA on malondialdehyde (MDA) concentration in the ischemic brain 48 h after the MCAO was insignificant. The One-Way ANOVA, F_{(2/12)}=3.981, P>0.05 (Bonferroni multiple comparison tests), values are means±s.e.m, (n for Sham =4, n for MCAO= 5, n for MCAO+PA=6).