Inhibitory effects of a novel PPAR-γ agonist MEKT1 on *Pomc* expression/ACTH secretion in AtT20 cells

Figure Legends of Supplimentary

Figure S1

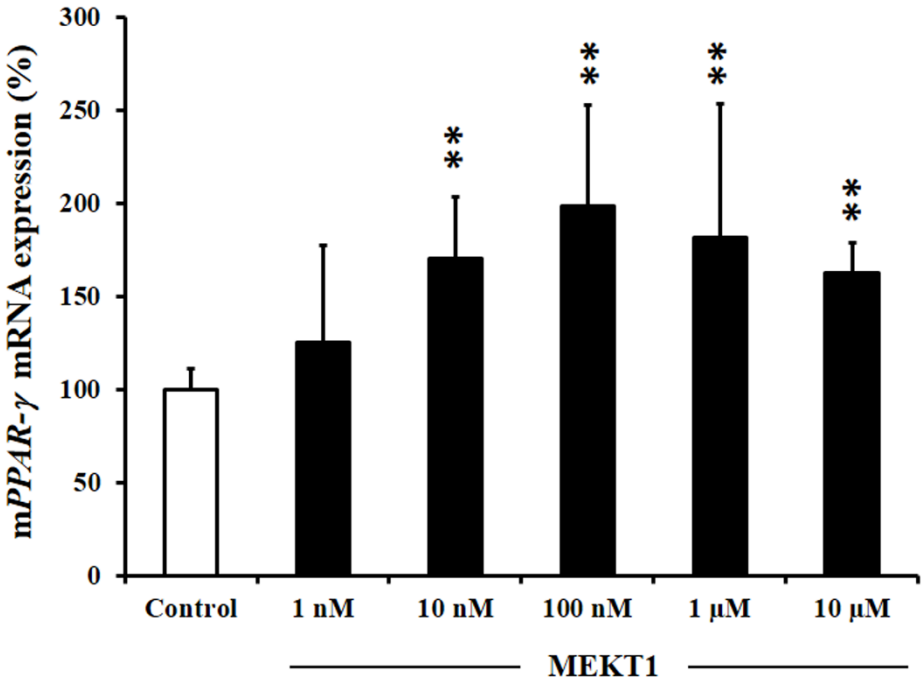

Figure S1. MEKT1-mediated effect of *PPAR-γ*mRNA expression in AtT20 cells in a dose-dependent manner. AtT20 cells were treated with MEKT1 (1 nM, 10 nM, 100 nM, 1 μM, or 10 μM) or 0.1% DMSO (vehicle control) for 24 hours. Data are expressed as percentages (100%) of control. Data represent mean ± SEM (n=4). **P<0.01 vs control.

Figure S2

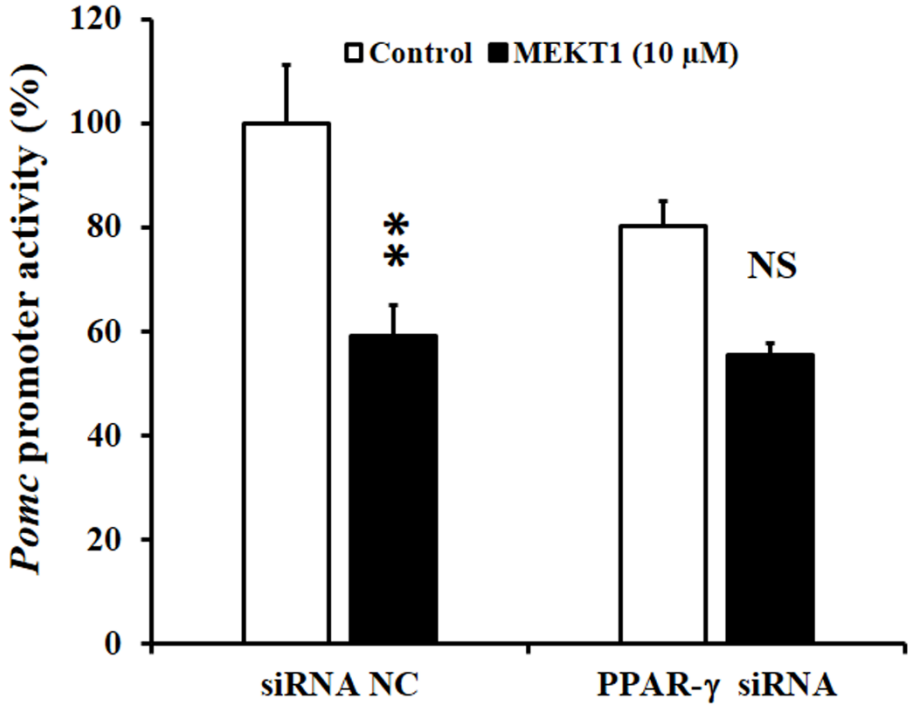

Figure S2. **Involvement of PPAR-γ in the MEKT1 effects on *Pomc* promoter activity.** AtT20 cells transiently transfected with rPomc-luc, pRSV-β-gal, and siRNA (negative control; NC or PPAR-γ) for 48 hours were incubated in the presence of either MEKT1 (10 μM) or 0.1% DMSO (control) for 24 hours, respectively. Results are expressed as percentages (100 %) of control. Each point represents mean ± SEM (n = 4). NS stands for "not significant." **P<0.01 vs negative control of siRNA at 10 μM MEKT1.

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Figure S3

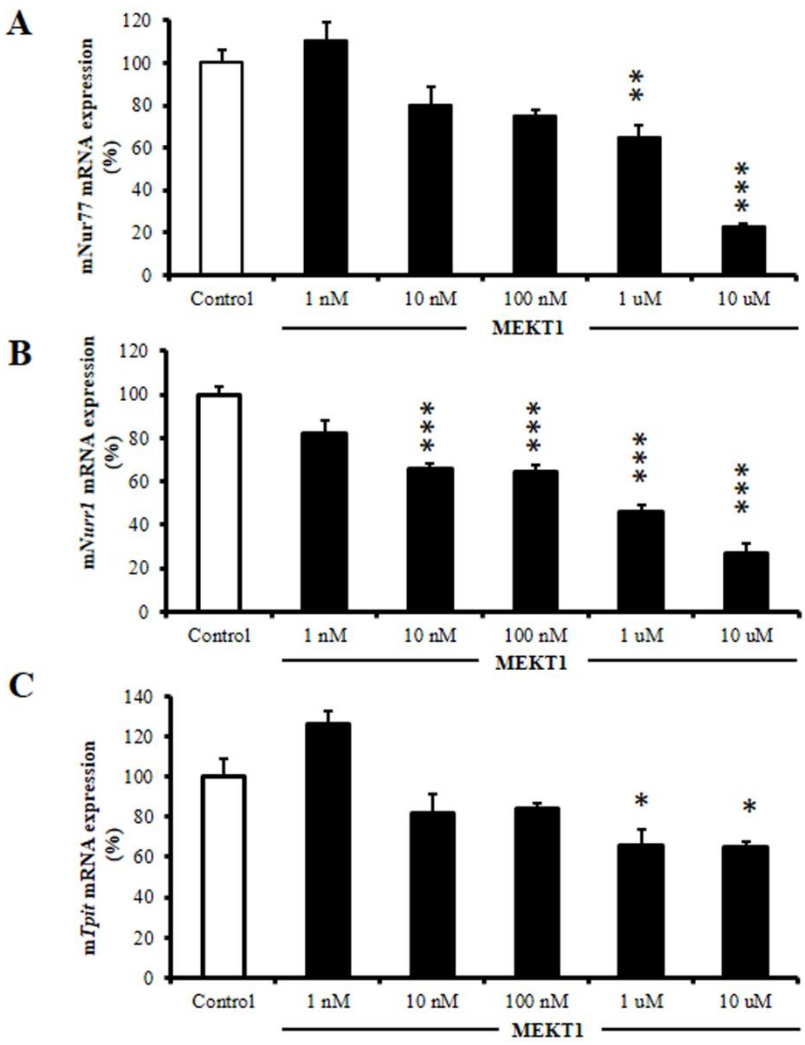

Figure S3. MEKT1-mediated effects on the mRNA expression of Nur77, *Nurr1*, and *Tpit* in AtT20 cells are dose-dependent.

(A) Dose-dependent effect of MEKT1 of *Nur77* mRNA expression. AtT20 cells were treated with MEKT1 (1 nM, 10 nM, 100 nM, 1 μM, or 10 μM) or 0.1% DMSO (vehicle control) for 24 hours. (B) Dose-dependent effect of MEKT1 on *Nurr1* mRNA expression. AtT20 cells were treated with MEKT1 (1 nM, 10 nM, 100 nM, 1 μM, or 10 μM) or 0.1% DMSO (vehicle control) for 24 hours. (C) Dose-dependent effect of MEKT1 on *Tpit* mRNA expression. AtT20 cells were treated with MEKT1 (1 nM, 10 nM, 100 nM, 1 μM, or 10 μM) or 0.1% DMSO (vehicle control) for 24 hours. Each point represents mean ± SEM (n=4). Data are presented as percentages of control (100%). *P<0.05, **P<0.01, ***P<0.001 vs control.

Figure S4

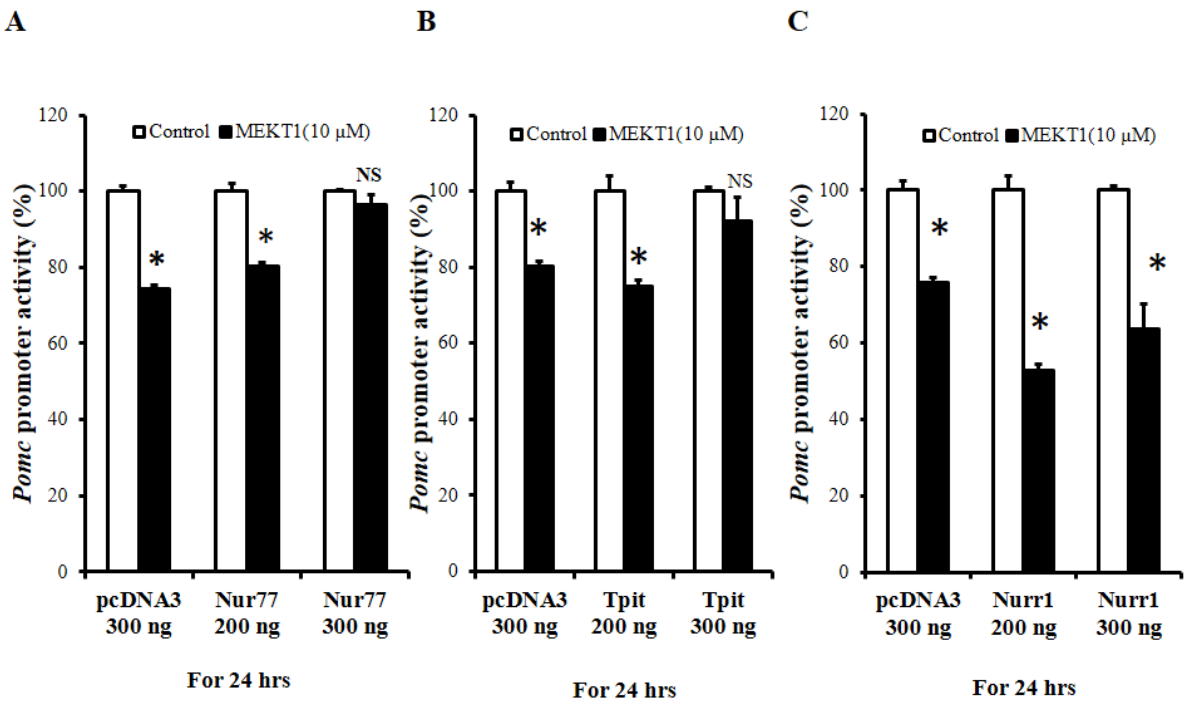

Figure S4. Effects of Nur77, Tpit, and Nurr1 overexpression on MEKT1-mediated effect of promoter activity of *Pomc*. AtT20 cells were transiently transfected with pcDNA3 and Nur77 overexpression plasmid in (A), Tpit overexpression plasmid in (B), and Nurr1 overexpression plasmid in (C) and 135 ng of rPomc-Luc, and 65 ng of pRSV-β-gal were incubated either in the presence of MEKT1 at 10 μM or DMSO at 0.1 % (control) for 24 hours before the luciferase assay. Each overexpression plasmid volume was maintained to 300 ng adding pcDNA3 empty vector. Results are expressed as percentages of each control (100%). Data represent mean ± SEM (n=4). NS means "not significant." *P<0.05 vs control.