

## Supplemental Figure Legends

### Figure S1 related to Figure 1.

(A) Western blot analysis of: A) Swiss WT-PPAR $\gamma$  adipocytes treated with TNF $\alpha$  alone or in combination with roscovitine or troglitazone (5 $\mu$ m) for 1 hour; B) Swiss WT-PPAR $\gamma$  and S273A-PPAR $\gamma$  cells differentiated to adipocytes.

### Figure S2 related to Figure 2.

(A) UCP1 staining of sections of EPI depots from 8-week-old C57BL/6N wild-type male mice intraperitoneally (i.p.) injected daily for 6 weeks with rosiglitazone (10mg/kg) or roscovitine (50mg/kg) or CL-316,243 (1mg/kg) or vehicle (-), n=4/group.

(B) Fasting blood insulin of mice from A.

(C) Respiratory exchange ratio (RER) of mice in Figure 2 was measured by CLAMS.

### Figure S3 related to Figure 4.

(A) UCP1-Cre/Tomato mouse BAT tissue under fluorescence microscopy.

**Figure S4 related to Figure 5.** The average signal intensities for genes in the microarray data set are pairwise compared between BAT to WAT, CL to WAT, roscovitine to WAT, rosiglitazone to WAT.

Figure S1

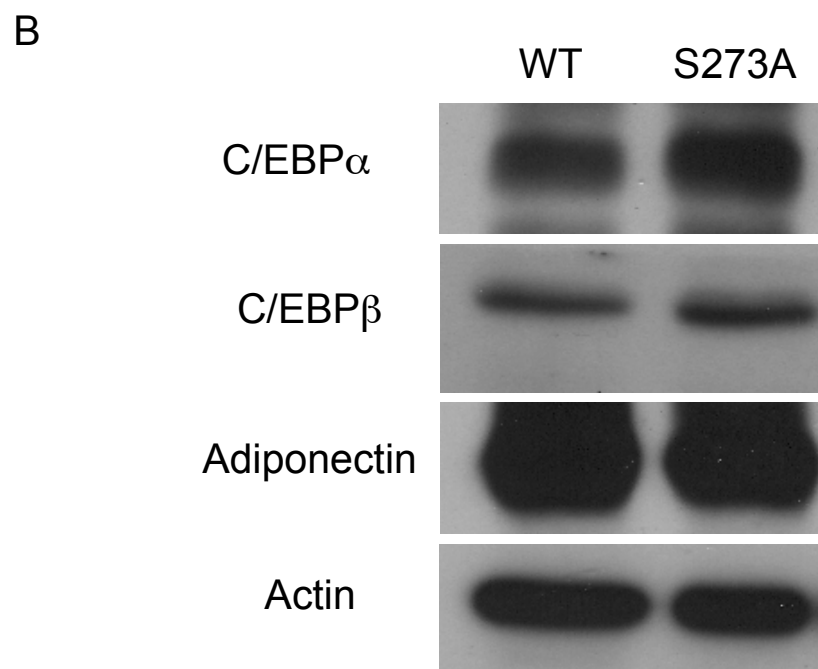
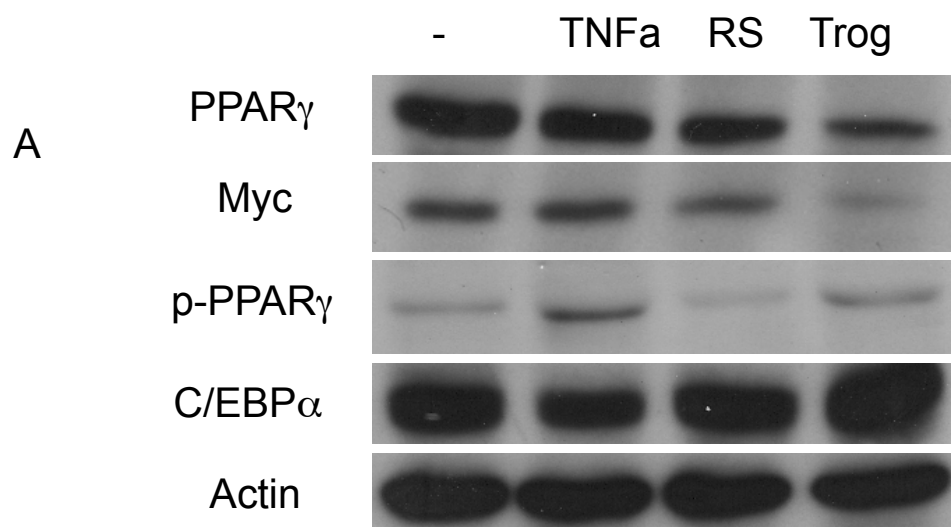


Figure S2

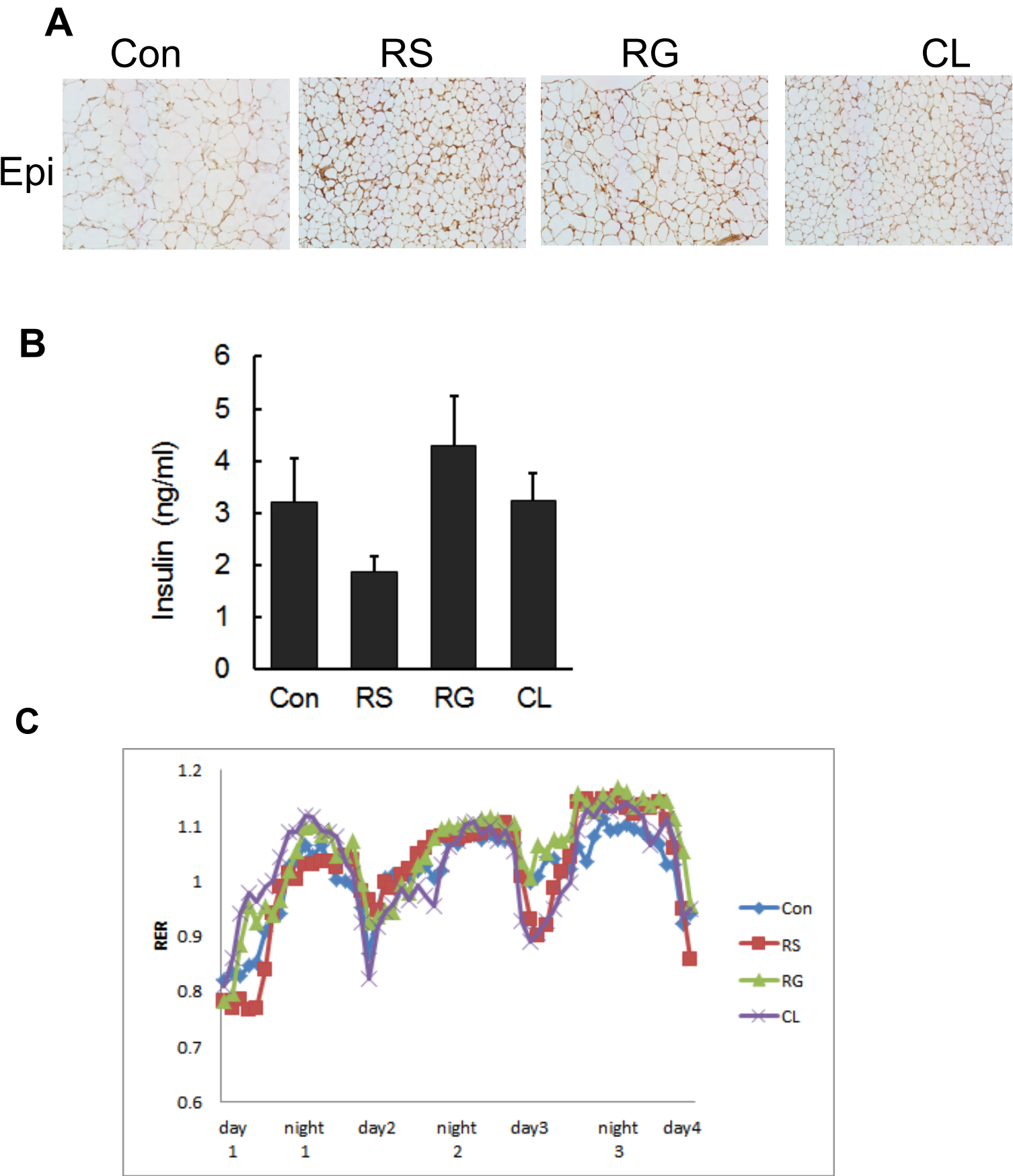


Figure S3

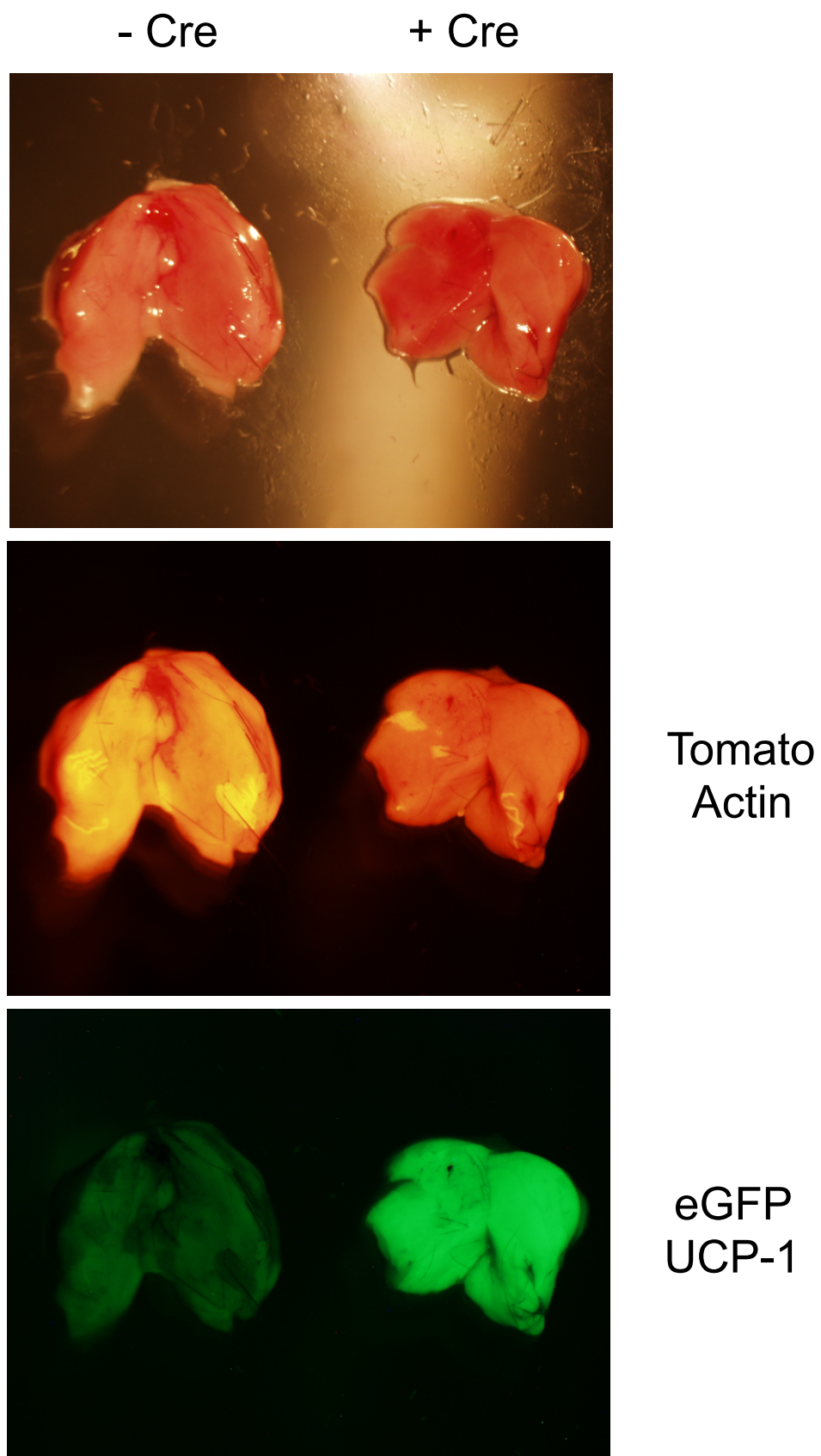


Figure S4

