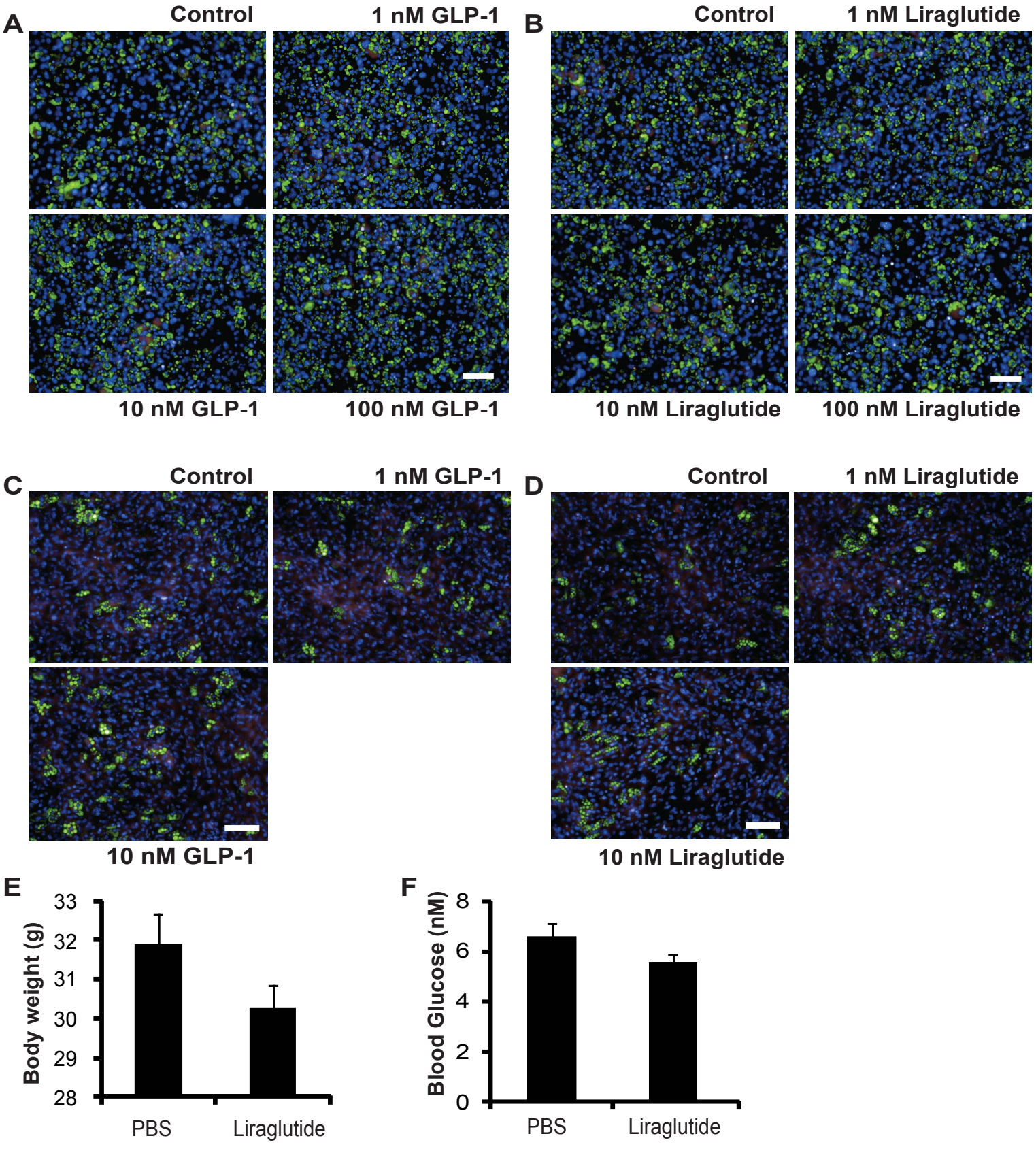

Suppl. Fig.1.

A,B) Cultured 3T3-L1 cells were incubated with indicated amounts of GLP-1 or liraglutide at onset of differentiation for 2 days; on day 8 differentiated 3T3-L1 cells were stained for lipid droplet formation (Bodipy 493/503, green), nuclei (Hoechst, blue), and cytosol (Syto60, red). Lipid droplet formation of differentiated adipocytes was quantified with high-throughput image analysis. Representative images of n=12 experiments. C,D) Primary pre-adipocytes were incubated with indicated amounts of GLP-1 or liraglutide at onset of differentiation for 2 days; on day 8 differentiated 3T3-L1 cells were stained for lipid droplet formation (Bodipy 493/503, green), nuclei (Hoechst, blue), and cytosol (Syto60, red). Lipid droplet formation of differentiated adipocytes was quantified with high-throughput image analysis. Representative images of n=4 experiments. E) Body weight from mice treated with twice daily s.c injection of liraglutide (100µg/kg) for 17 days (n=12). E) Fasted blood glucose levels in mice treated with twice daily s.c injection of liraglutide (100µg/kg) for 17 days (n=12). The graphs represents mean ± SEM (**p<0.01, ***p<0.001).

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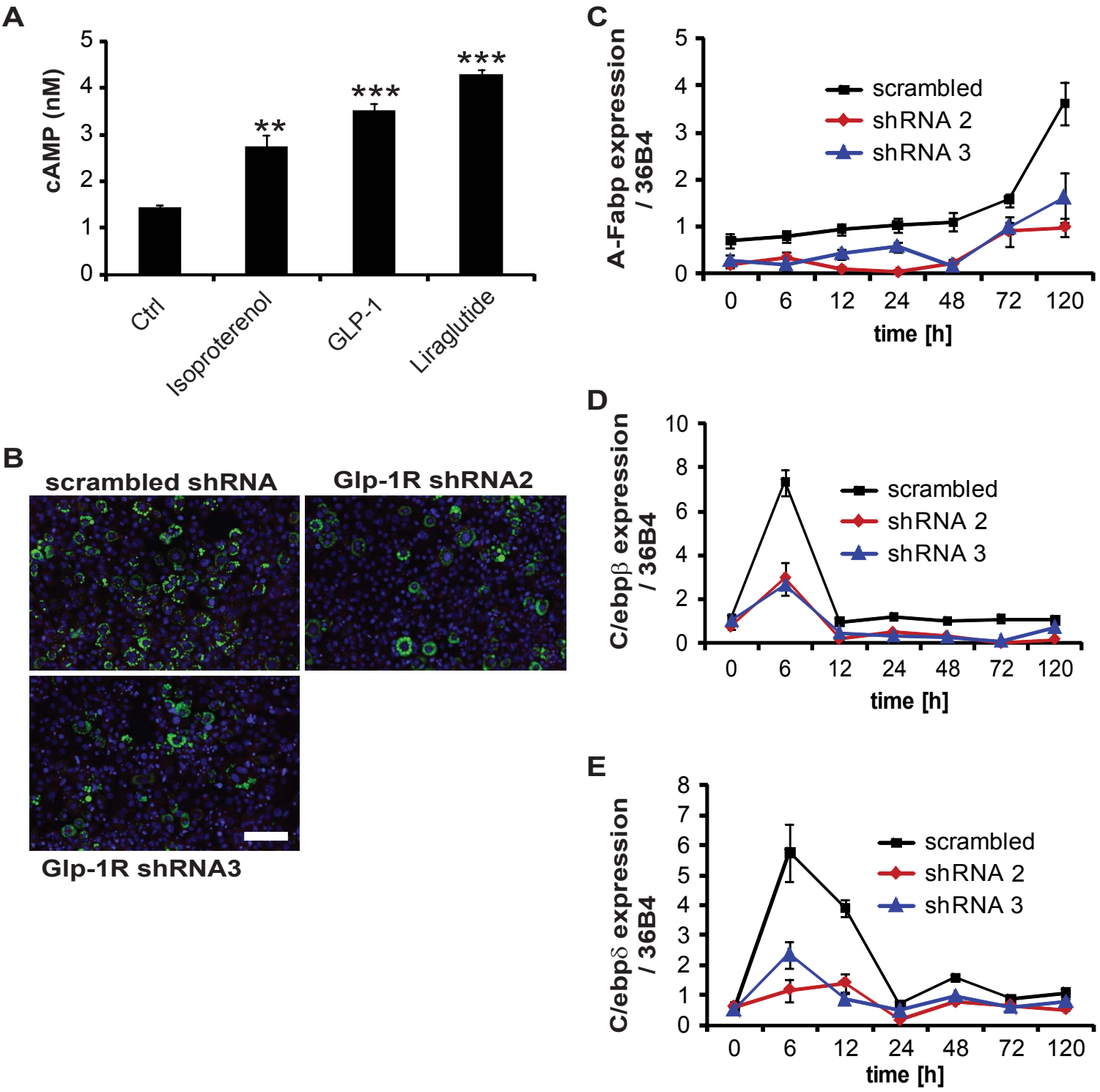

Suppl. Fig.2.
A) Intracellular cAMP levels in 3T3-L1 pre-adipocytes following treatment with 1, 10, and 100 nM GLP-1 or liraglutide for 30 min. 10 µM isoproterenol was used as positive control (n=4). B) Analysis of adipocyte differentiation using high-throughput image analysis in cells infected with GLP-1R shRNA expressing lentivirus or scrambled shRNA control and treated with 10 nM GLP-1 during induction of cell differentiation. Representative images shown are of n=12 experiments. C,D) Analysis of A-Fabp and C/ebpβ/δ mRNA expression in 3T3-L1 pre-adipocytes infected with GLP-1R shRNA expressing lentivirus (shRNA2 and shRNA3) or scrambled shRNA (n=4) and treated with 10 nM GLP-1 during induction of cell differentiation. The graphs represents mean ± SEM (**p<0.01, ***p<0.001).