## **Supplemental Material**

Supplementary Fig. 1. Plin5 protein expression levels were unchanged in skeletal muscle of transgenic mice when compared to levels of wt samples. For Western blot analysis, musculus quadriceps was surgically prepared from wt and transgenic mice, respectively. Analyzed tissue samples contained 10  $\mu$ g protein. GAPDH was used as loading control. Western blot analysis was performed as described in the method section and an antibody specific to Plin5 was used.

Supplementary Fig. 2. Oleic acid mediated TG synthesis is not significantly changed in Plin5-transfected COS-7 cells when compared to cells transfected with LacZ. To exclude the possibility that Plin5 expression *per se* promotes lipogenesis, we analyzed the time-dependent incorporation of oleic acid into TG of COS-7 cells either transfected with LacZ or Plin5 as described in the method section. In brief, lipids were extracted from cells incubated for 2 h up to 16 h with oleic acid and  $^3$ H-labeled oleic acid as radioactive tracer. At the indicated time periods, lipids were extracted and separated by thin layer chromatography. The TG corresponding bands were excised and radioactivity was measured in a  $^6$ -counter. Data are shown as mean + SD of  $^6$  = 3.



