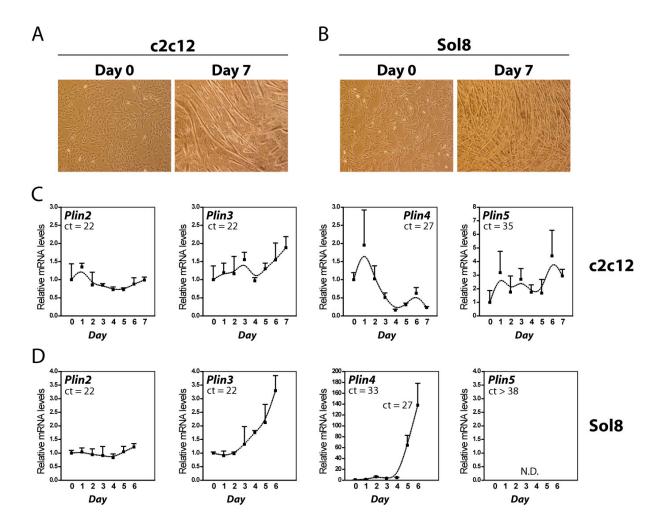


### Supplemental Figure 1

#### Supplemental Fig. 1: Specificity of Perilipin antibodies

**Cells** were transfected with pcDNA3-vectors containing full-length cDNAs coding for Plin1, Plin2, Plin3, Plin4 or Plin5. 24 hours post transfection, cells were incubated in the presence of BSA-OA for an additional 24 hours before harvested. Protein samples from COS-1 cells (A) or mouse C2C12 cells (B) were processed and subjected for Western analysis using antibodies as described in the material and methods section. No cross reactivity is observed for any of the antibodies used, verifying that the produced Plin4 and Plin5 antibodies do not recognize any of the other mouse Perilipin proteins.



## Supplemental Figure 2

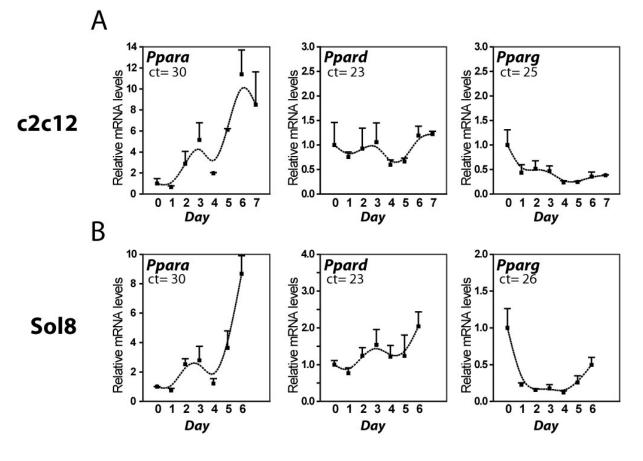
# Supplemental Fig. 2: Expression of perilipins during differentiation of C2C12 and Sol8 cells

C2C12 and Sol8 cells were grown confluent and subjected to differentiation. Samples were harvested daily to determine gene expression .

**(A-B)** Representative pictures of C2C12 and Sol8 cells before (day 0) and after differentiation (day 7). Pictures were taken using a 10x objective.

**(C)** Relative mRNA expression of Plin2-5 against 36B4 in C2C12 cells during differentiation. Media was renewed at day 3 and day 6.

(D) Relative mRNA expression of Plin2-5 in Sol8 cells each day during differentiation. Media was renewed at day 3 and day 6. Results are presented as Mean $\pm$ SD (n=3). One representative of three independent experiments is shown.



#### Supplemental Figure 3

# Supplemental Fig. 3: Expression of PPARs during differentiation of C2C12 and Sol8 cells

C2C12 and Sol8 cells were grown confluent and subjected to differentiation. Samples were harvested daily to determine gene expression.

(A)Relative expression levels of Ppara, Pparb and Ppard against 36B4 during differentiation of C2C12

**(B)** Relative expression levels of Ppara, Ppard and Pparg against 36B4 during differentiation of Sol8 cells. Ct-value at day 0 is given for each gene. Results are presented as Mean±SD (n=3). One representative of three independent experiments is shown.