Supplementary Figure.2







Supplementary Figure 2 Dose-dependent effects of $1,25(OH)_2D_3$ on expression of brown adipocyte marker genes and vitamin D related genes, determined by quantitative RT-PCR analysis. Levels of (A) *Elovl3*, (B) *Cidea*, (C) *C/ebpβ*, (D) *Pgc1a*, (E) *Vdr*, (F) *Cyp27b1* (1 alpha-hydroxylase) and (G) *Cyp24a1* (24-hydroxylase) mRNAs were quantified in C2C12 cells cultured in the absence or presence of 10^{-13} , 10^{-11} , 10^{-9} , 10^{-7} or 10^{-5} M $1,25(OH)_2D_3$ for 2, 4 or 6 days in myogenic differentiation media. Expression at day 0 (before differentiation media and $1,25(OH)_2D_3$ was added) is also included for reference. Significant effects of day of differentiation were observed for *Elovl3* (*P*=0.04), *Cidea* (*P*=0.038), *C/ebpβ* (*P*=0.019) and *Pgc1a* (*P*=0.029). There were significant effects of $1,25(OH)_2D_3$ concentration on *C/ebpβ* (*P*<0.001) and *Pgc1a* (*P*=0.006), but not for *Elovl3* or *Cidea*. There were significant two-way interactions between day of differentiation and $1,25(OH)_2D_3$ concentration observed for *Vdr* (*P*=0.029), *Cyp27b1* (*P*=0.047) and *Cyp24a1* (*P*<0.001) mRNA.