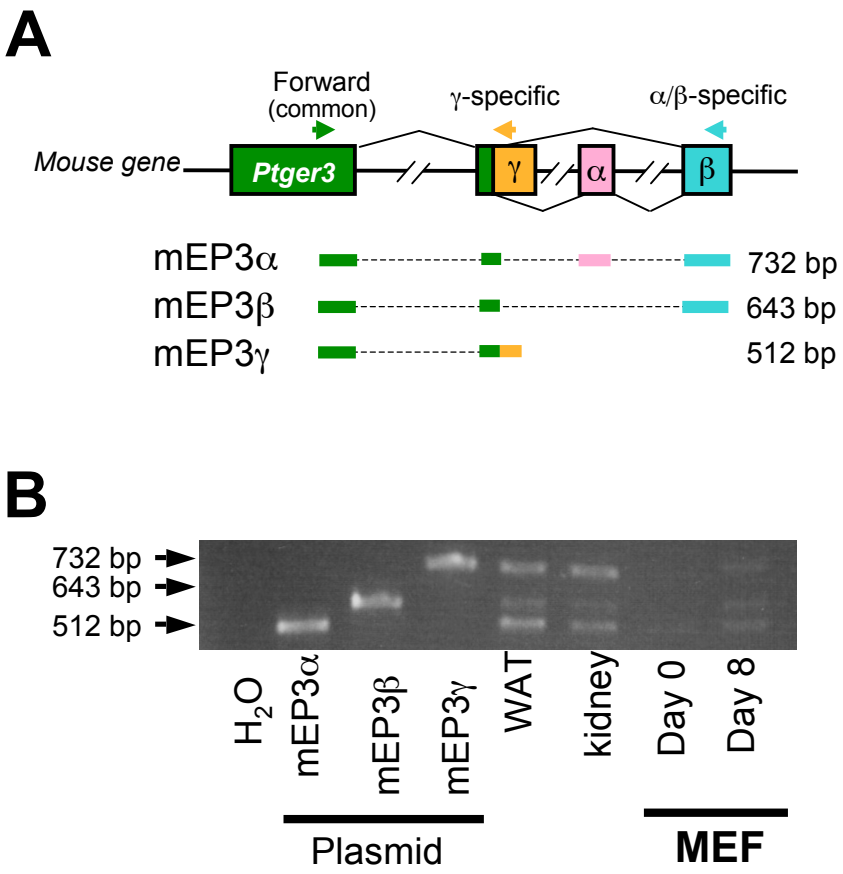
SUPPLEMENTARY FIGURE LEGENDS

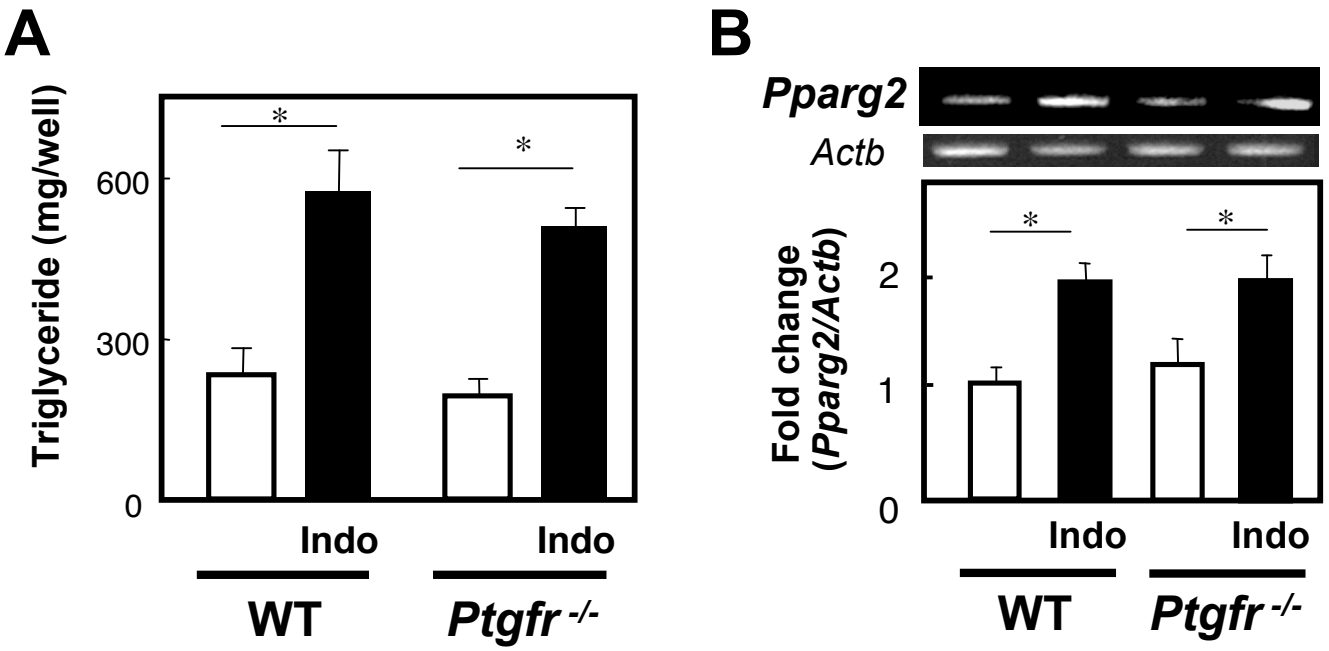
Supplementary Fig. 1. Expression of mouse EP3 (mEP3) isoforms in differentiated MEF cells. (A) Schematic representation of the generation of three transcripts of the mouse *Ptger3* gene by alternative splicing and simultaneous detection of these *Ptger3* transcripts by RT-PCR. The mEP3α-, mEP3β-, and mEP3γ-derived PCR products are 732, 643, and 512 base pairs in size, respectively. (B) Expression of mEP3 isoforms in epididymal white adipose tissue (WAT), kidney and untreated (Day 0) and differentiated (Day 8) MEF cells. Total RNA was subjected to the reverse transcription reaction and subsequent PCR analysis. The plasmid cDNA for each mEP3 isoform and water was used as a positive and a negative control for PCR, respectively. The experiments were independently repeated three times, and representative results are shown.

Supplementary Fig. 2. FP receptor deficiency fails to affect adipocyte differentiation of MEFs. MEF cells from wild type (WT) and *Ptgfr*$^{-/-}$ mice grown to confluency were treated with DIC in the presence or absence of indomethacin (10 μM). Triglyceride content of the cells was measured on day 8 (A), and total RNA was extracted on day 8, and subjected to real time RT-PCR analysis (B). The *Pparg2* gene expression levels were normalized to the β-actin (*Actb*) mRNA levels. Values represent the means ± SEM of three independent experiments ($n = 3$). *$p < 0.05$.

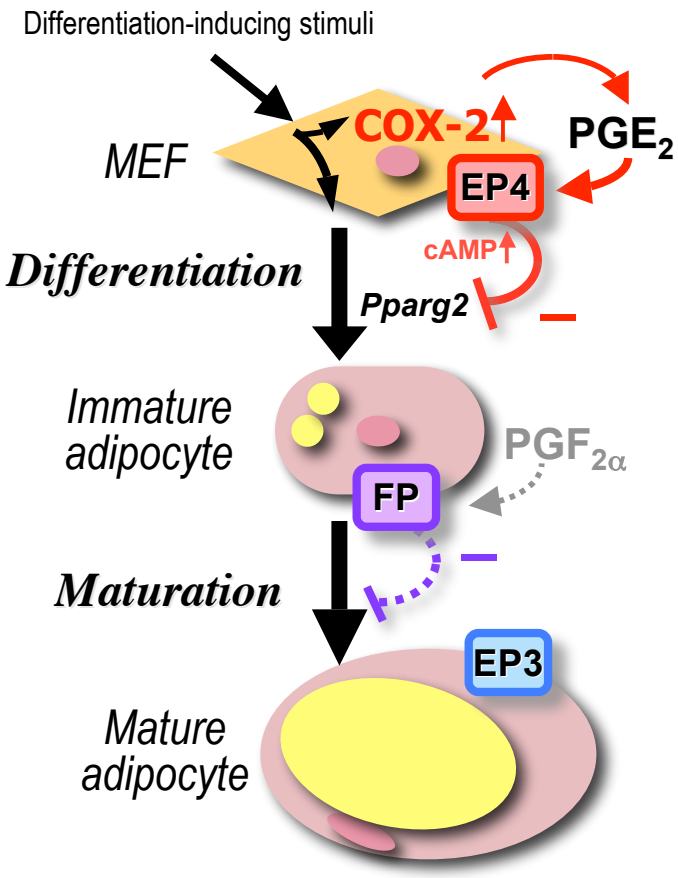
Supplementary Fig. 3. Schematic model representing the relationship among prostanoid receptor signaling during adipocyte differentiation of MEFs. Adipocyte differentiation stimuli induce COX-2 gene expression and PGE_2 production, and the resultant PGE_2 reduces the peak level of *Pparg2* expression via the EP4 receptor-cAMP pathway in an autocrine manner. The functional FP receptor is induced during differentiation and has the potential to exert negative regulation, but is not directly involved in adipocyte differentiation of the MEF system. The functional EP3 receptor is also induced during differentiation but does not affect adipocyte differentiation itself.



Inazumi et al. Supplementary Fig. 1



Inazumi et al. Supplementary Fig. 2



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