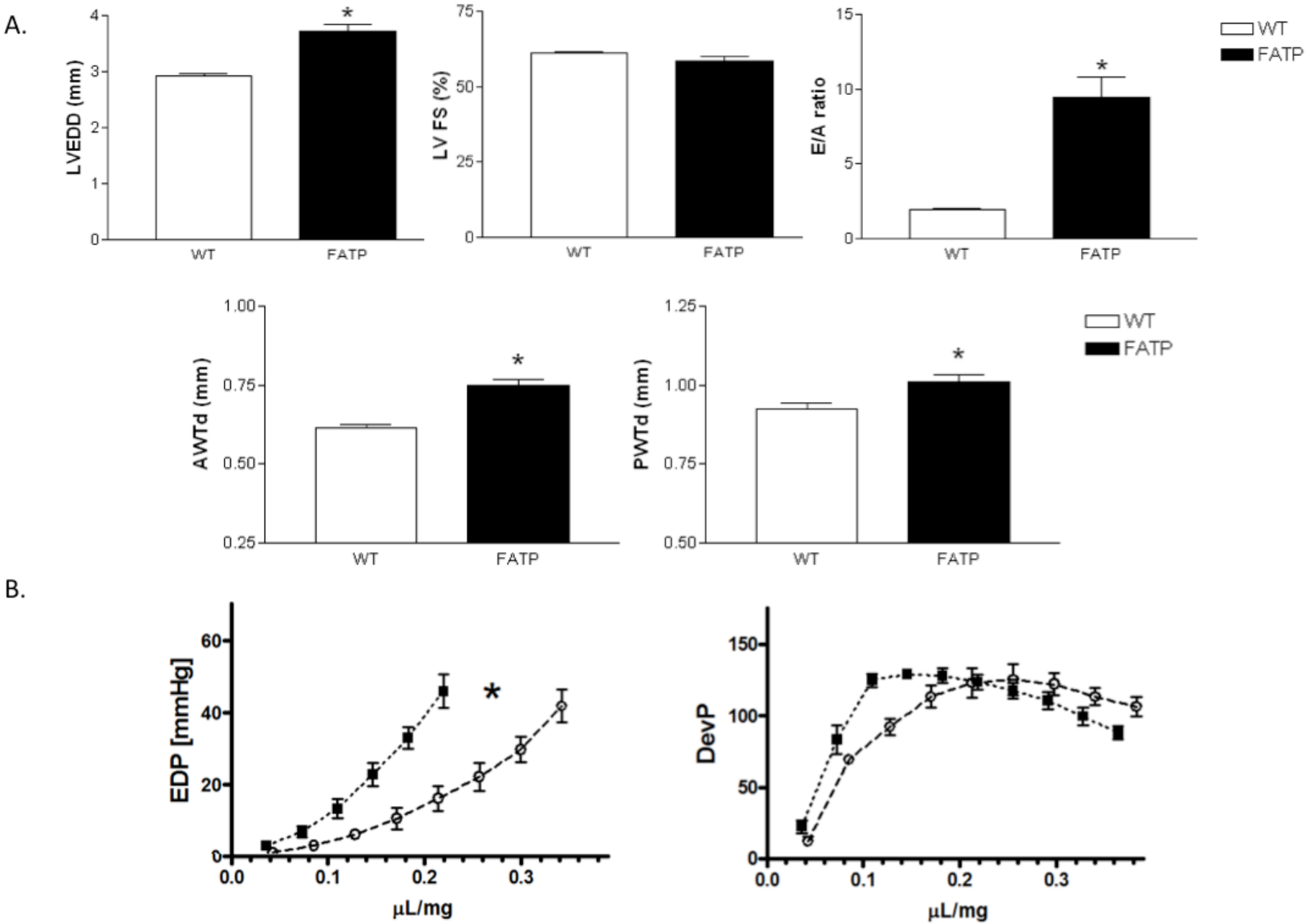
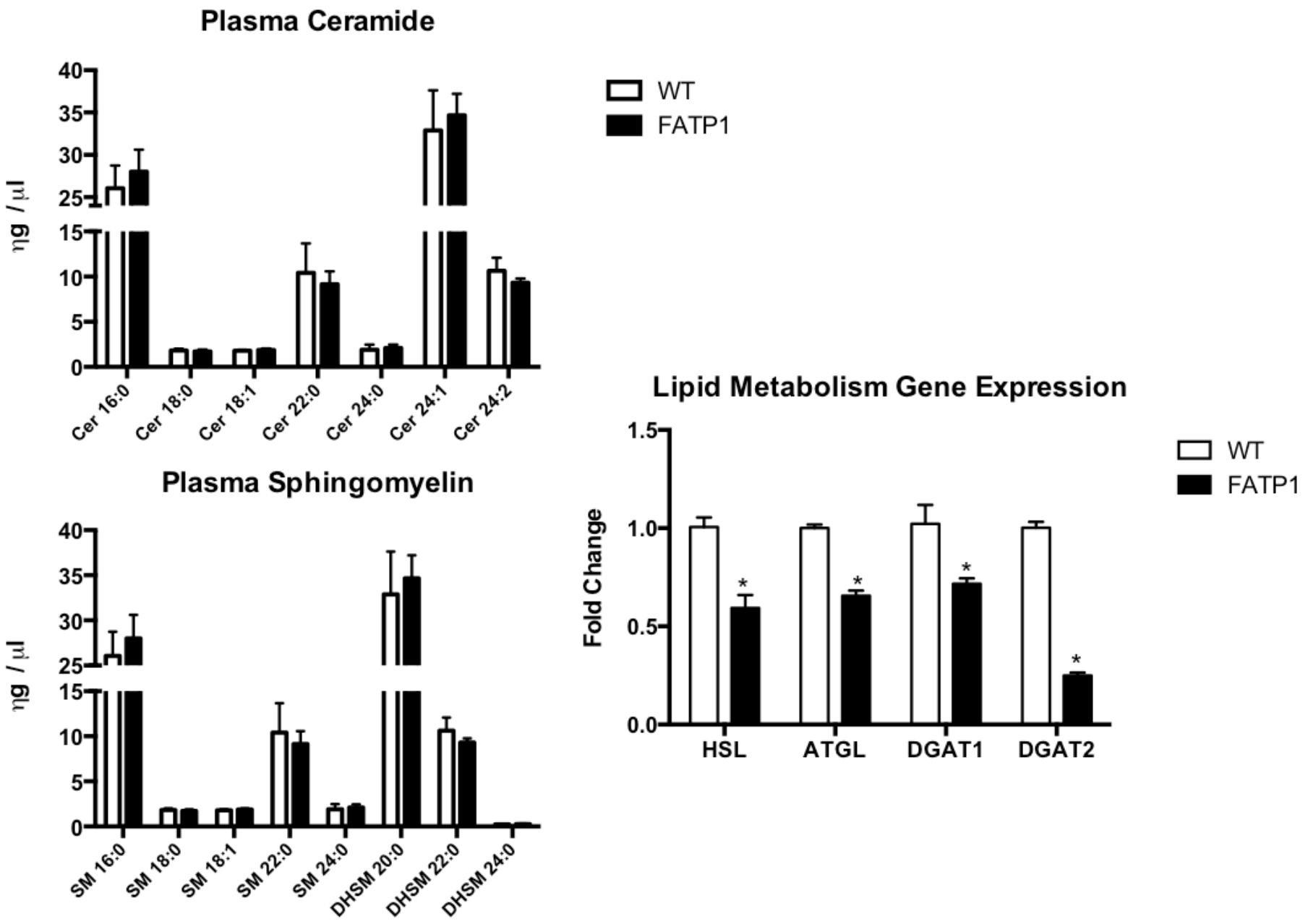
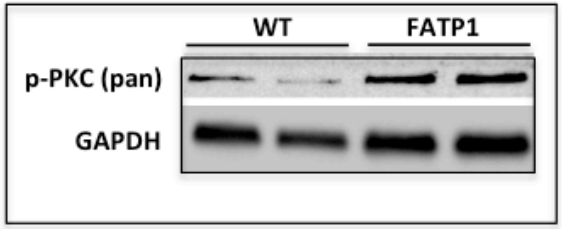
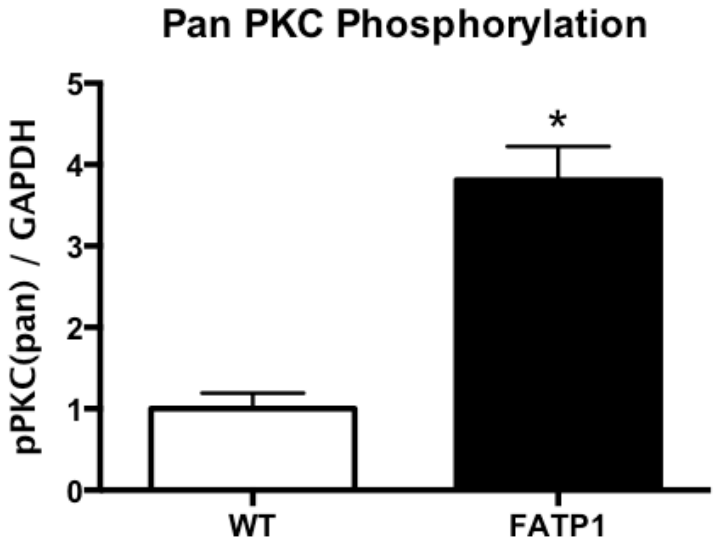


Supplemental Figure 1: FATP1 mice have cardiac hypertrophy and diastolic dysfunction. **A.** FATP1 hearts have increased left-ventricular end diastolic diameter LVEDD), increased early/late diastolic filling ratio (E/A), increased anterior and posterior wall thickness (AWTd and PWTd) with preserved fractional shortening (FS) by echocardiography. **B.** Pressure-volume curves by Langendorff method showing an upward and leftward shift of the curves in FATP hearts indicating decreased LV compliance for a given LV volume normalized by heart weight with preserved LV developed pressures.



Supplemental Figure 2: FATP1 mice have unchanged plasma concentrations of ceramide and sphingomyelin, and decreased cardiac expression of genes regulating TAG synthesis (DGAT1, DGAT2), and DG metabolism (ATGL, HSL) (n = 5-6, error bars are mean ± standard error).





Supplemental Figure 3: FATP1 hearts have increased phophorylation of the hydrophobic motif of PKC using a phospho-PKC pan (beta-II S660) antibody (n = 7-9, error bars are mean ± standard error).

Gene Name	Gene Symbol	Fold Change	Gene Name	Gene Symbol	Fold Change
Acaa2	NM_177470	0.22	**Mlycd**	NM_019966	0.52
Acadl	NM_007381	0.46	**Mmp9**	NM_013599	0.79
Acadm	NM_007382	0.52	**Ncoa3**	NM_008679	0.47
Acox1	NM_015729	0.53	**Ncoa6**	NM_019825	0.67
Acox3	NM_030721	0.72	**Nr1h3**	NM_013839	0.43
Acsl1	NM_007981	0.52	**Olr1**	NM_138648	1.30
Acsl3	NM_001033606	0.71	**Pck1**	NM_011044	0.41
Acsl4	NM_019477	0.98	**Pck2**	NM_028994	1.89
Acsl5	NM_027976	1.03	**Pdpk1**	NM_011062	0.90
Adipoq	NM_009605	0.54	**Pltp**	NM_011125	0.66
Angptl4	NM_020581	0.98	**Ppara**	NM_011144	0.40
Apoa1	NM_009692	0.23	**Ppard**	NM_011145	0.65
Apoe	NM_009696	1.14	**Pparg**	NM_011146	0.53
BC006779	NM_183162	0.42	**Ppargc1a**	NM_008904	0.78
Cd36	NM_007643	0.67	**Ppargc1b**	NM_133249	0.77
Chd9	NM_177224	0.76	**Pprc1**	NM_001081214	0.58
Clu	NM_013492	0.52	**Pten**	NM_008960	0.73
Cpt1a	NM_013495	1.04	**Rxra**	NM_011305	0.70
Cpt1b	NM_009948	0.57	**Rxrb**	NM_011306	0.94
Cpt2	NM_009949	0.38	**Rxrg**	NM_009107	0.55
Creb1	NM_133828	0.76	**Scd1**	NM_009127	0.93
Crebbp	NM_001025432	0.65	**Sirt1**	NM_019812	0.61
Cyp27a1	NM_024264	1.10	**Slc22a5**	NM_011396	0.61
Cyp4a10	NM_010011	0.41	**Slc27a1**	NM_011977	34.17
Dgat1	NM_010046	0.48	**Slc27a4**	NM_011989	0.80
Ehhadh	NM_023737	0.36	**Slc27a5**	NM_009512	0.28
Eln	NM_007925	0.78	**Slc27a6**	NM_001081072	2.22
Ep300	NM_177821	0.68	**Smarcd3**	NM_025891	0.71
Etfdh	NM_025794	0.51	**Sorbs1**	NM_009166	0.58
Fabp1	NM_017399	0.43	**Src**	NM_009271	1.07
Fabp3	NM_010174	0.53	**Tgs1**	NM_054089	0.81
Fabp4	NM_024406	0.63	**Txnip**	NM_023719	0.98
Fabp5	NM_010634	1.02	**Ucp1**	NM_009463	0.85
Fabp7	NM_021272	0.74	**Actb**	NM_007393	1.23
Fads2	NM_019699	0.58	**B2m**	NM_009735	1.00
Fgr	NM_010208	2.38	**Gapdh**	NM_008084	1.03
Gyk	NM_008194	1.20	**Gusb**	NM_010368	0.88
Hif1a	NM_010431	1.73	**Hsp90ab1**	NM_008302	0.90
Hmgcs2	NM_008256	0.42			
Hspd1	NM_010477	1.00			
Ilk	NM_010562	0.82			
Klf10	NM_013692	0.86			
Lpl	NM_008509	0.40			
Med1	NM_013634	0.77			

Supplemental Table: Transcript fold change of PPAR target genes by PCR array. n=2.