SUPPLEMENTAL FIGURE LEGENDS

Figure S1 HRG-β1 induces FABP5 promoter activity in a dose-dependent manner. MCF-7 cells were transiently transfected with a luciferase reporter driven by an 800 bp of the proximal FABP5 promoter. Cells were treated with varying doses of HRG-β1 for 16 hr., lysed and analyzed for luciferase activity. Luciferase activity was normalized to β-galactosidase. Data are mean±S.D (n=3).

Figure S2 HRG-β1-induced FABP5 promoter activity is mediated by ERK, PI3K and NF-κB. MCF-7 cells were transiently transfected with a luciferase reporter driven by an 800 bp of the proximal FABP5 promoter. Cells were pre-treated with PD (20 μM), wortmannin (100 nM), or PDTC (100 μM) for 1 hr. prior to the addition of HRG-β1 (30 ng/ml, 16 hr.). Cells were lysed and analyzed for luciferase activity. Luciferase activity was normalized to β-galactosidase. Data are mean±S.D (n=3).

Figure S3 KLF2 suppresses FABP5 promoter activity. MCF-7 cells were transiently transfected with a luciferase reporter driven by an 800 bp of the proximal FABP5 promoter. Cells were infected with Ad-KLF2 or Ad-GFP 24 hr. prior to treatment with HRG-β1 for 16 hr. Cells were lysed and analyzed for luciferase activity. Luciferase activity was normalized to β-galactosidase. Data are mean±S.D (n=3).

Figure S4 Decreasing the expression level of FABP5 hampers the ability if HRG-β1 to activate PPARβ/δ. MCF-7 cells were transiently transfected with a luciferase reporter driven by 3X PPRE, and by an expression vector for PPARβ/δ. Cells were treated with HRG-β1 for 16 hr., lysed and analyzed for luciferase activity. Luciferase activity was normalized to β-galactosidase. Data are mean±S.D. of two independent experiments carried out in triplicates. *p=0.04 *vs.* HRG-β1control.

Figure S5 FABP5 mediates HRG-β1-induced proliferation of MDA-MB453 mammary carcinoma cells. (**a**) MDA-MB453 cells were serum-starved for 24 hr. and treated with HRG-β1 (30 ng/ml) for 4 hr. FABP5 mRNA levels were assessed by Q-PCR and normalized to 18S RNA. mean±S.D (n=3). (**b**) MDA-MB453 cells were infected with an empty lentivirus or lentivirus harboring FABP5shRNA. 3 days following infection, cells were treated with HRG-β1 for 24 hr. Cell proliferation was assessed by cell counting. Data are mean±S.D. (n=3) *p=0.0004. Inset: immunoblot demonstrating decreased expression of FABP5.

Fig. S1

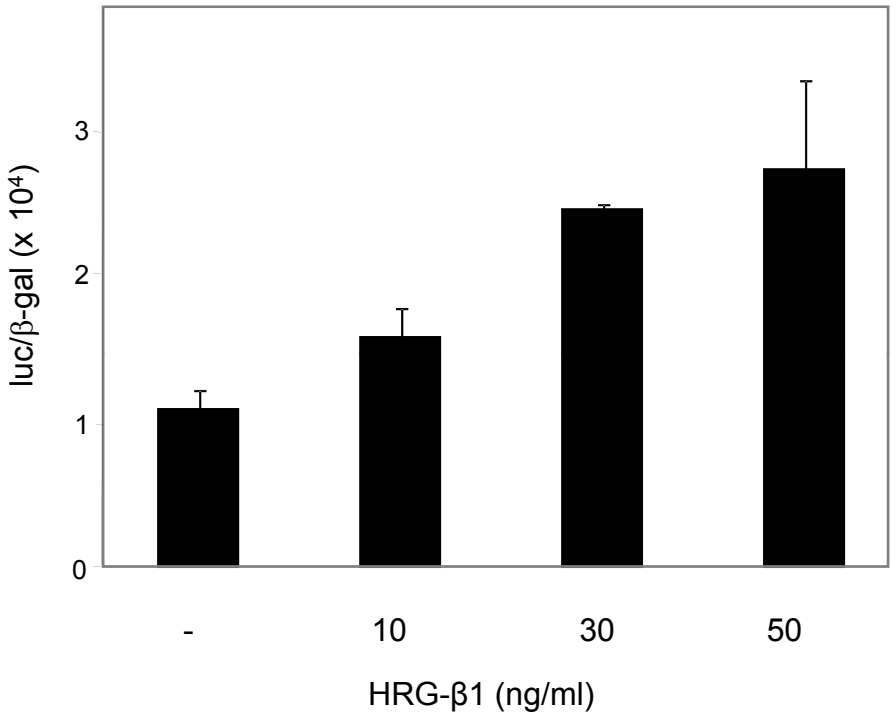


Fig. S2

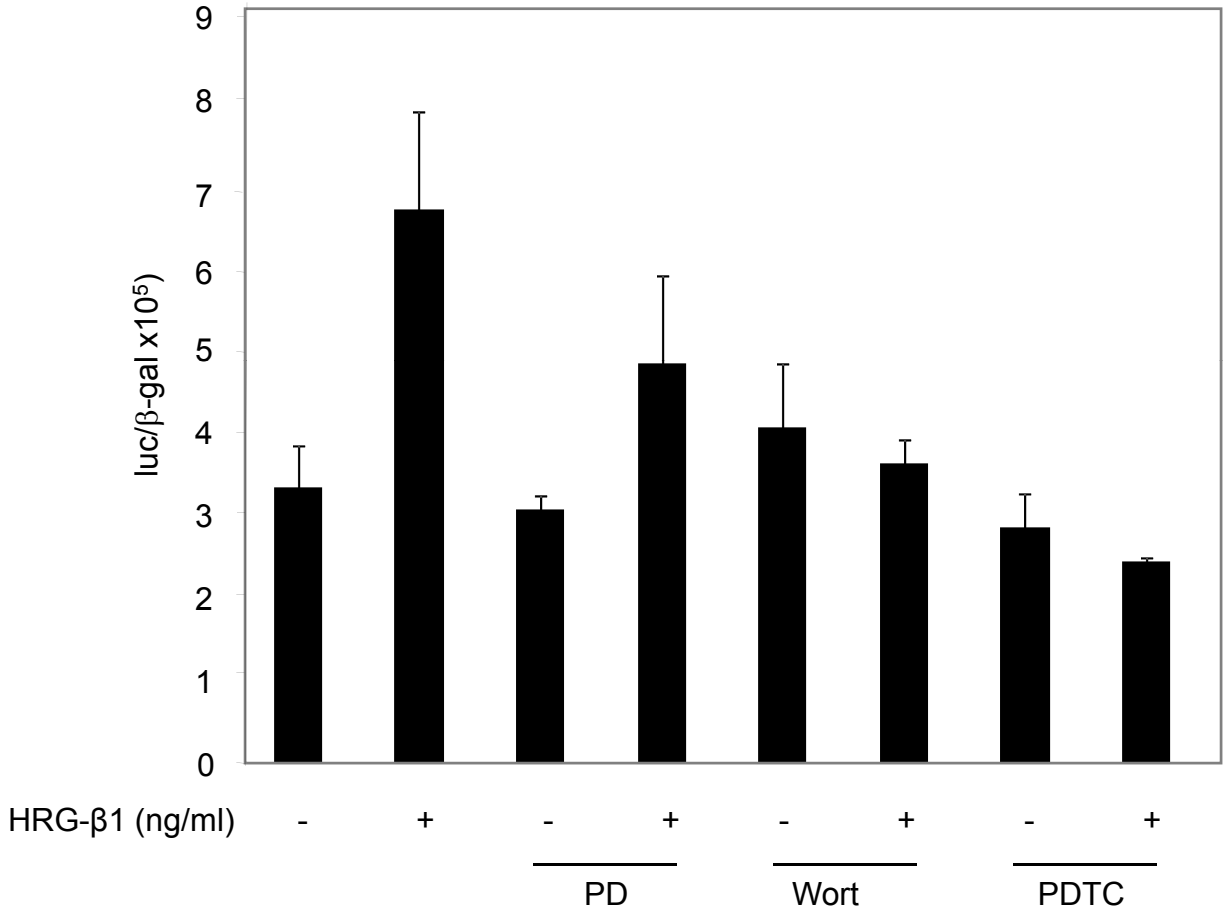


Fig. S3

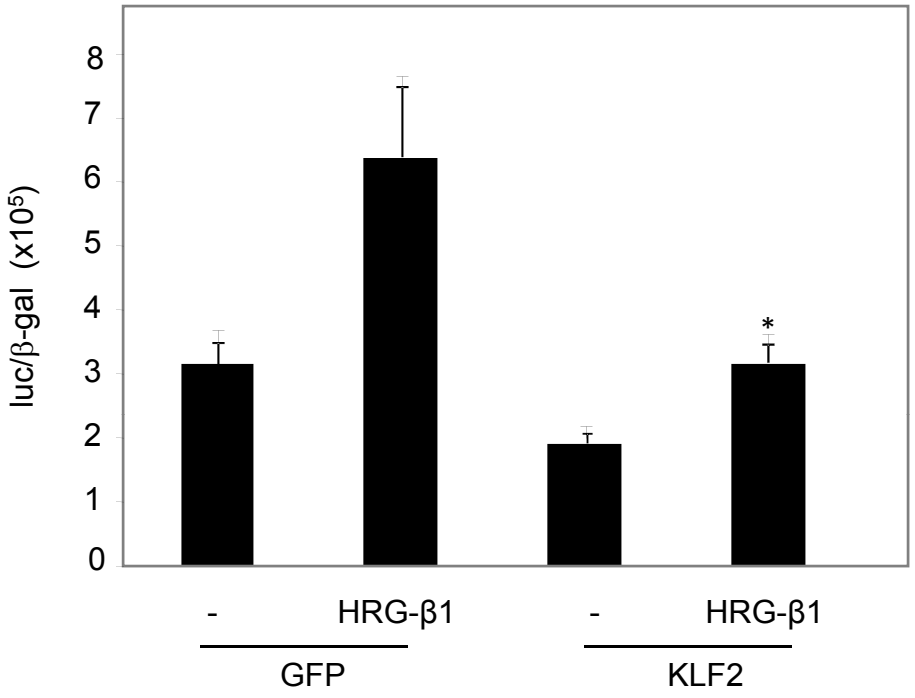
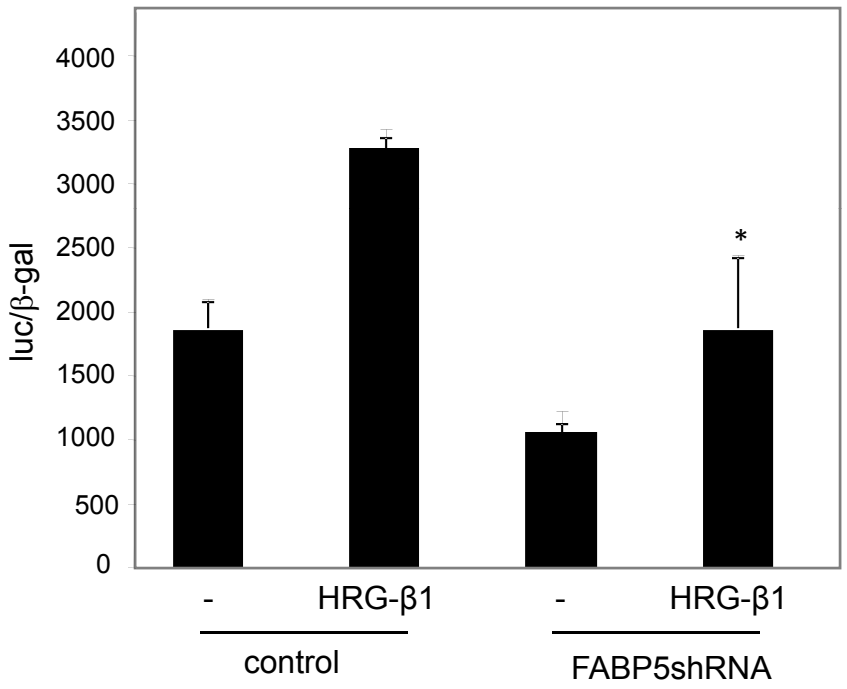
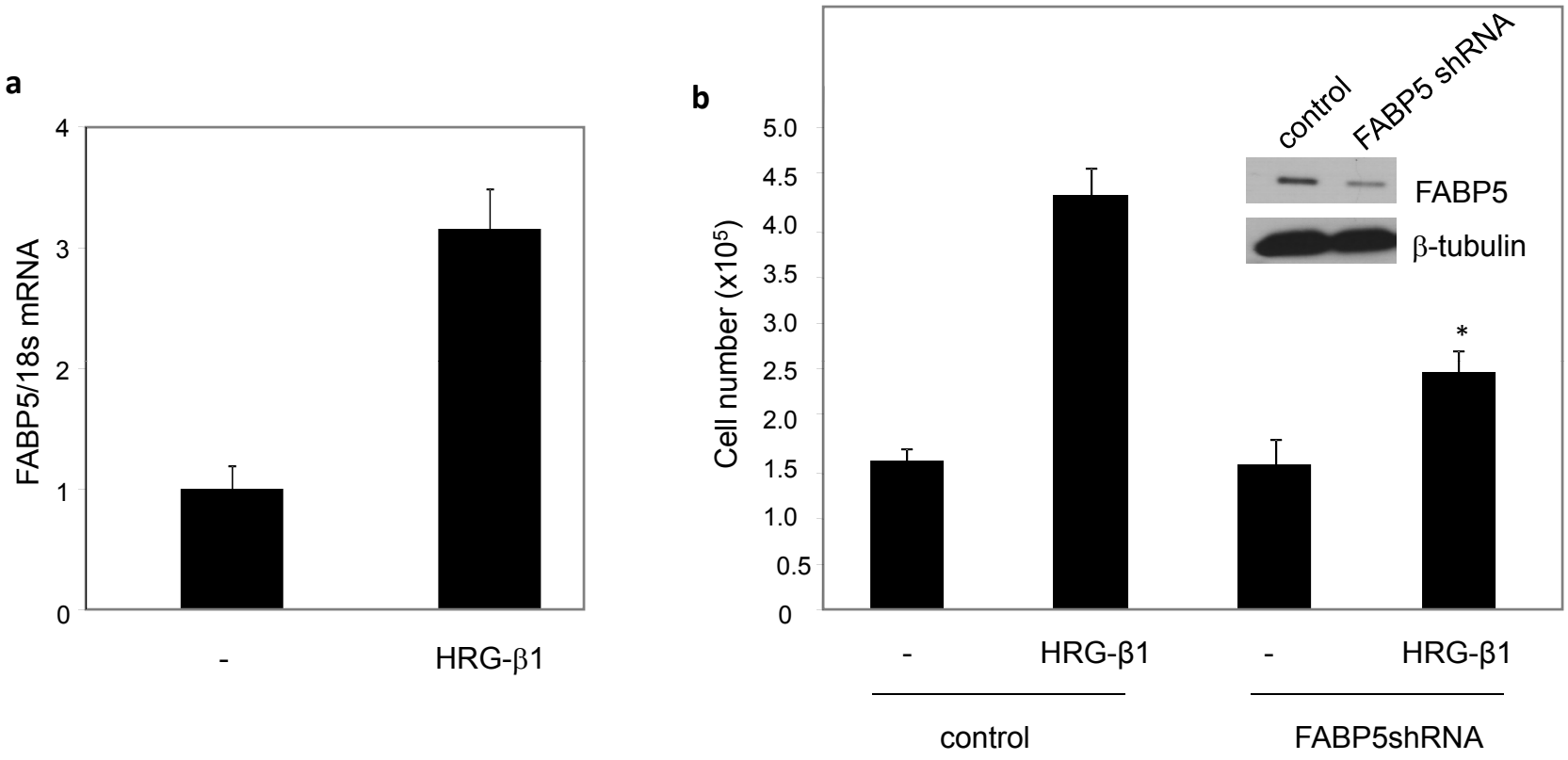


Fig. S4


4000
3500
3000
2500
2000
1500
1000
500
0
luc/β-gal
*
-
HRG-β1
-
HRG-β1
control
FABP5shRNA


a
FABP5/18s mRNA
4
3
2
1
0
-
HRG-β1
b
Cell number (x10^5)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0
control
FABP5 shRNA
FABP5
β-tubulin
*
-
HRG-β1
-
HRG-β1
control
FABP5shRNA