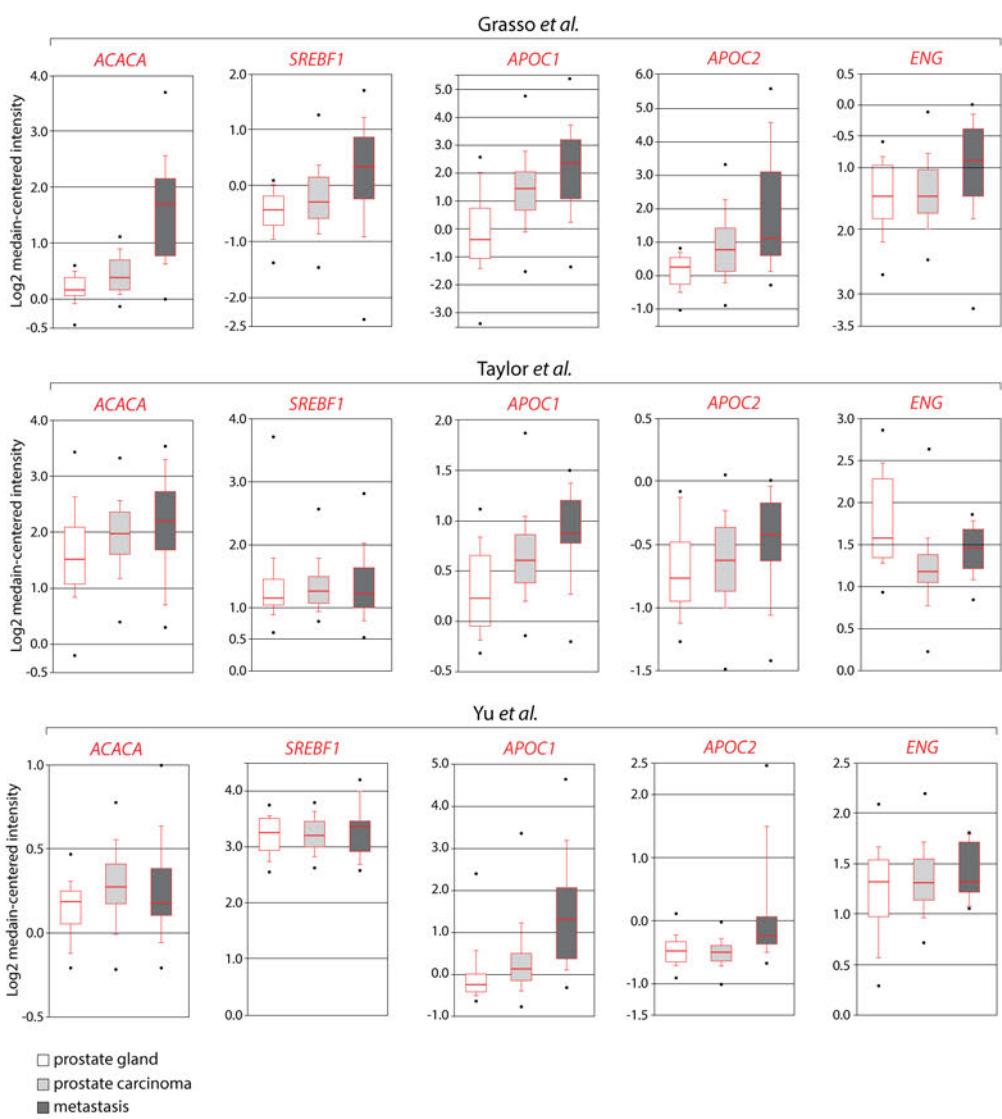


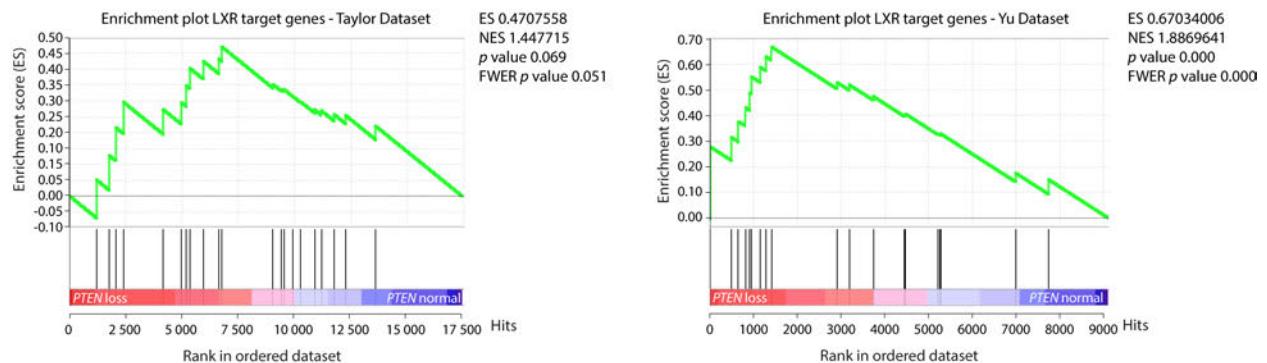
File Name: Supplementary Information

Description: Supplementary Figures and Supplementary Tables

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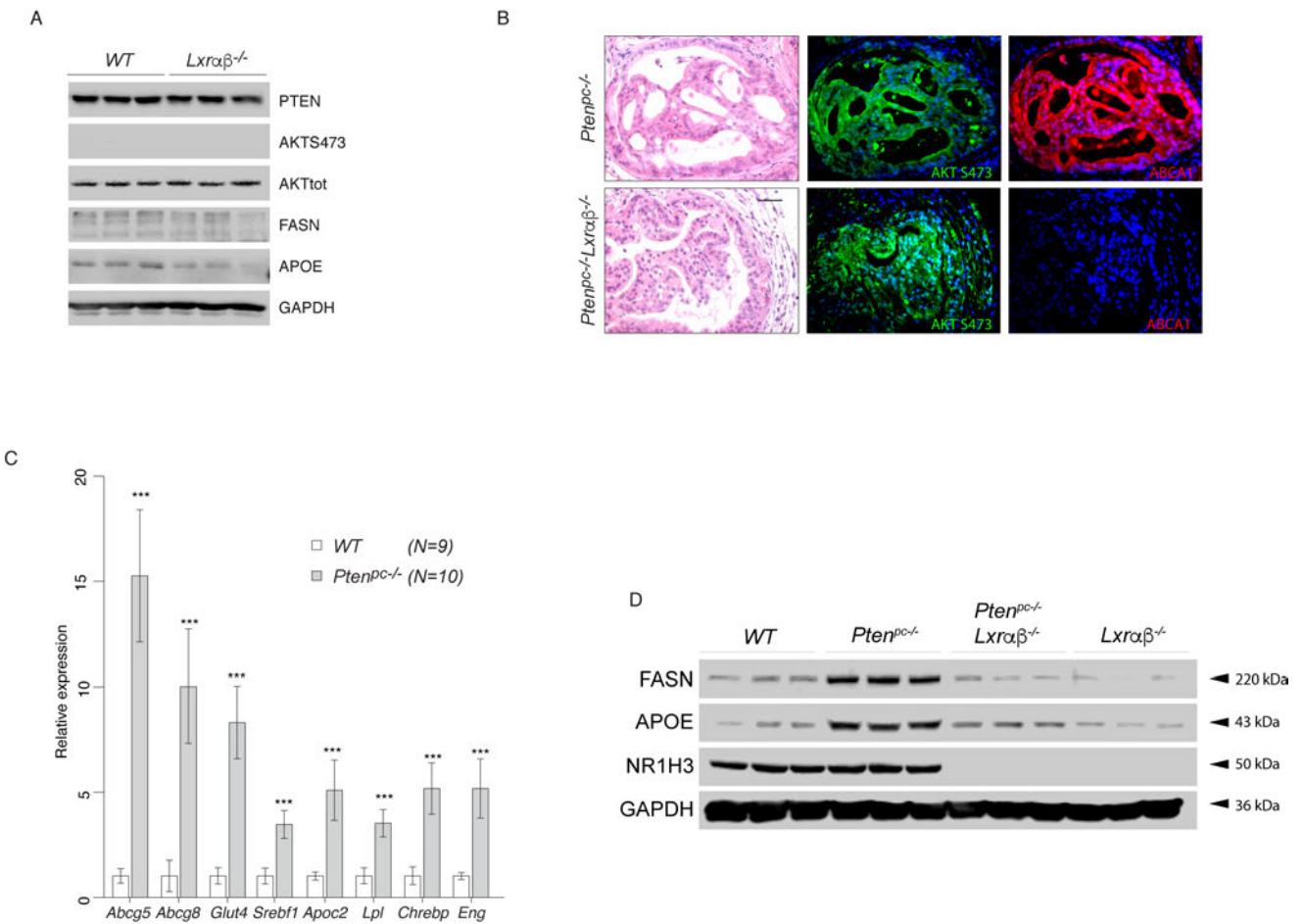


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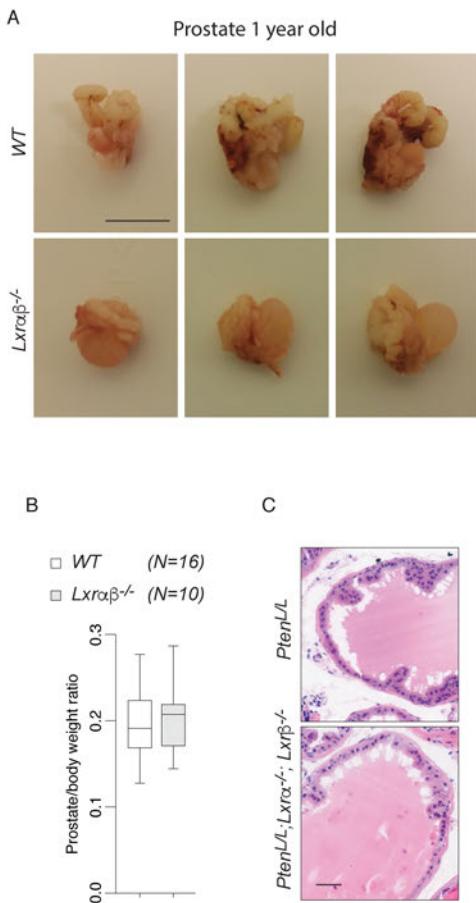
Supplementary Figure 1 | Human datasets analysis

(A) ONCOMINE boxed plot of *ACACA*, *SREBF1*, *APOC1*, *APOC2* and *ENG* expression levels between human prostate gland, prostate carcinoma and metastasis in datasets referred Grasso et al., 2012⁵⁵; Taylor et al., 2010⁵; Yu et al., 2004⁵⁶. All data are represented as mean \pm SEM. *** *p*<0.001. (B) Gene Set Enrichment Analysis of LXR target gene signature based on PTEN status using Taylor et al., 2010² and Yu et al., 2004⁴¹ datasets.



Supplementary Figure 2 | LXR targets status in mice lacking LXRs and/or PTEN

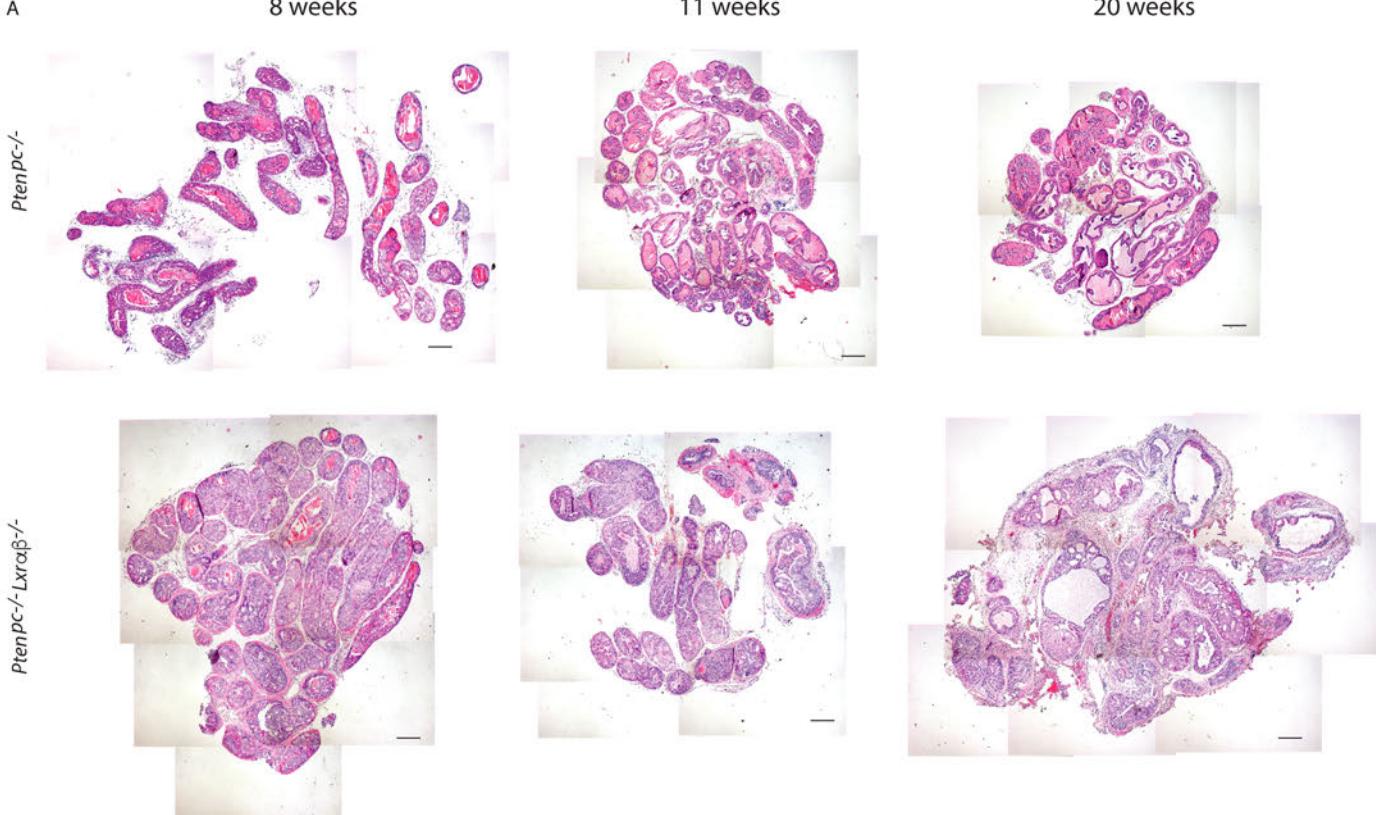
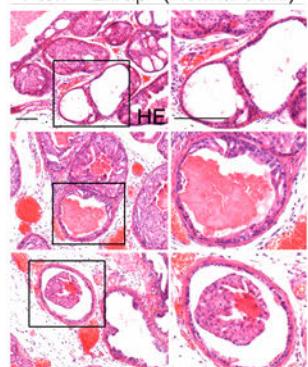
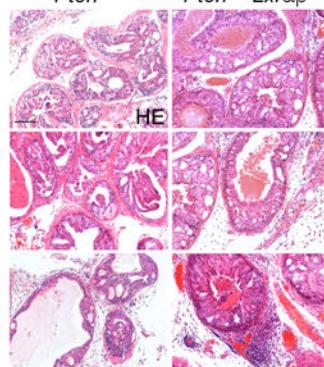
(A) Western blot analysis of PTEN, AKTser473, AKT, FASN, APOE accumulation on prostatic samples from wild type and *Lxra β -/-* mice. (B) HE-stained sections on prostatic samples from *WT* and *Lxra β -/-* and immunofluorescence against AKTser473 and ABCA1, Scale bar 100 μ m. (C) Relative expression, using prostatic samples from wild type and *Lxra β -/-* mice, of LXR target genes previously described to have LXRE within promoter sequences (N = 9/10). (D) Western blot analysis of FASN, APOE, NR1H3 accumulation on prostatic samples from wild type, *Pten $^{pc-/-}$* , *Pten $^{pc-/-}Lxra\beta^{-/-}$* and *Lxra\beta^{-/-} mice. Data are represented as mean \pm SEM and statistical analysis has been performed with the Student's *t*-test; *** p<0.001.*



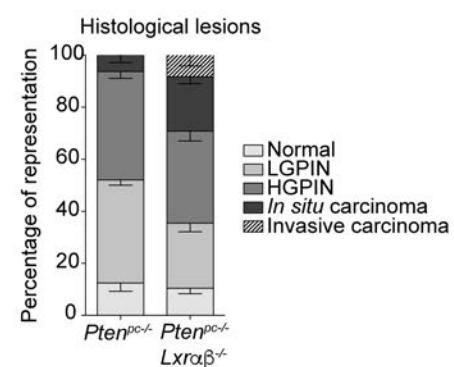
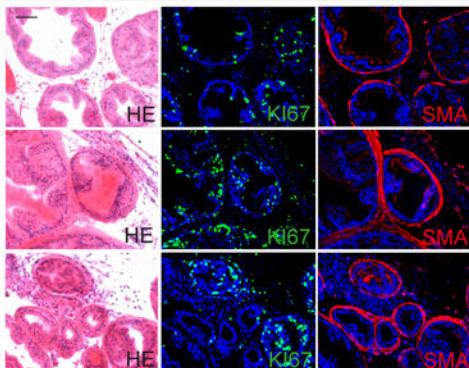
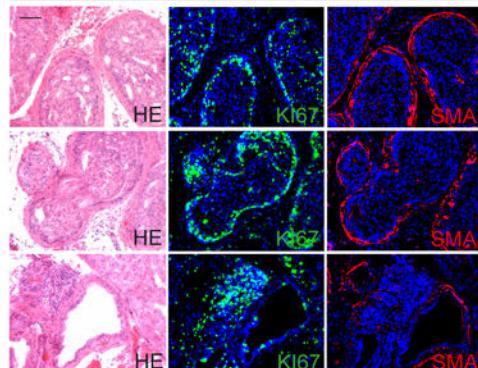
Supplementary Figure 3 | LXR-null mice prostatic phenotype

(A) Gross anatomy and (B) weight of representative prostates from 1 year-old *WT* and *Lxra β ^{-/-}* mice. Scale bar, 1cm (N = 16/10). (C) Hematoxylin and eosin (HE) staining of prostate sections from *WT* and *Lxra β ^{-/-}* mice (6 months old), Scale bar, 100 μ m. Data are represented as mean \pm SEM and statistical analysis has been performed using Student's *t*-test.

A

B *Pten^{pc-/-} Lxra^{β-/-}* (Normal acini)C *Pten^{pc-/-}* *Pten^{pc-/-} Lxra^{β-/-}*

D

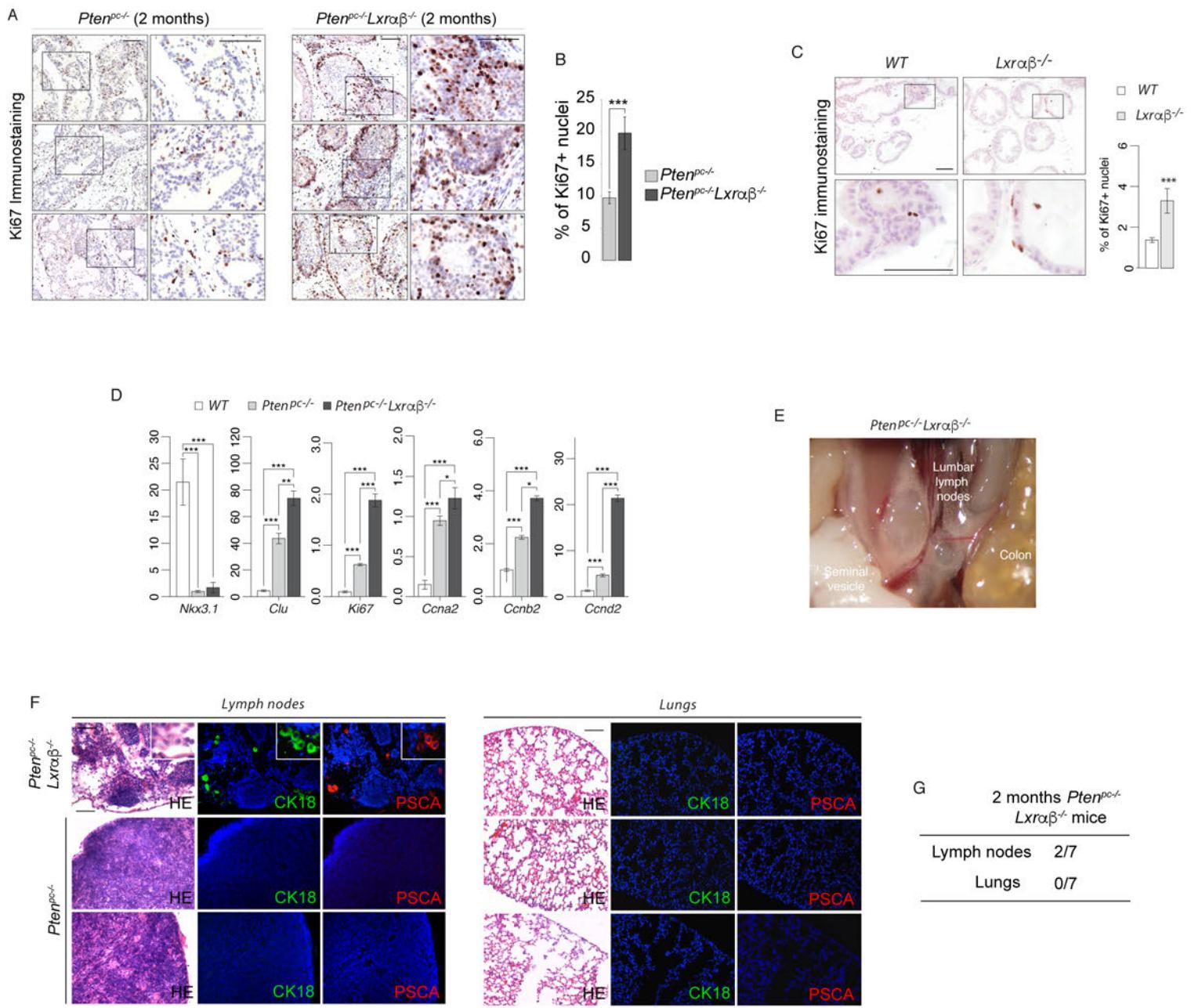
E *Pten^{pc-/-}* (8 weeks old prostate)*Pten^{pc-/-} Lxra^{β-/-}* (8 weeks old prostate)

F Invasive carcinoma frequency

<i>Pten^{pc-/-}</i>	0/6
<i>Pten^{pc-/-} Lxra^{β-/-}</i>	2/6

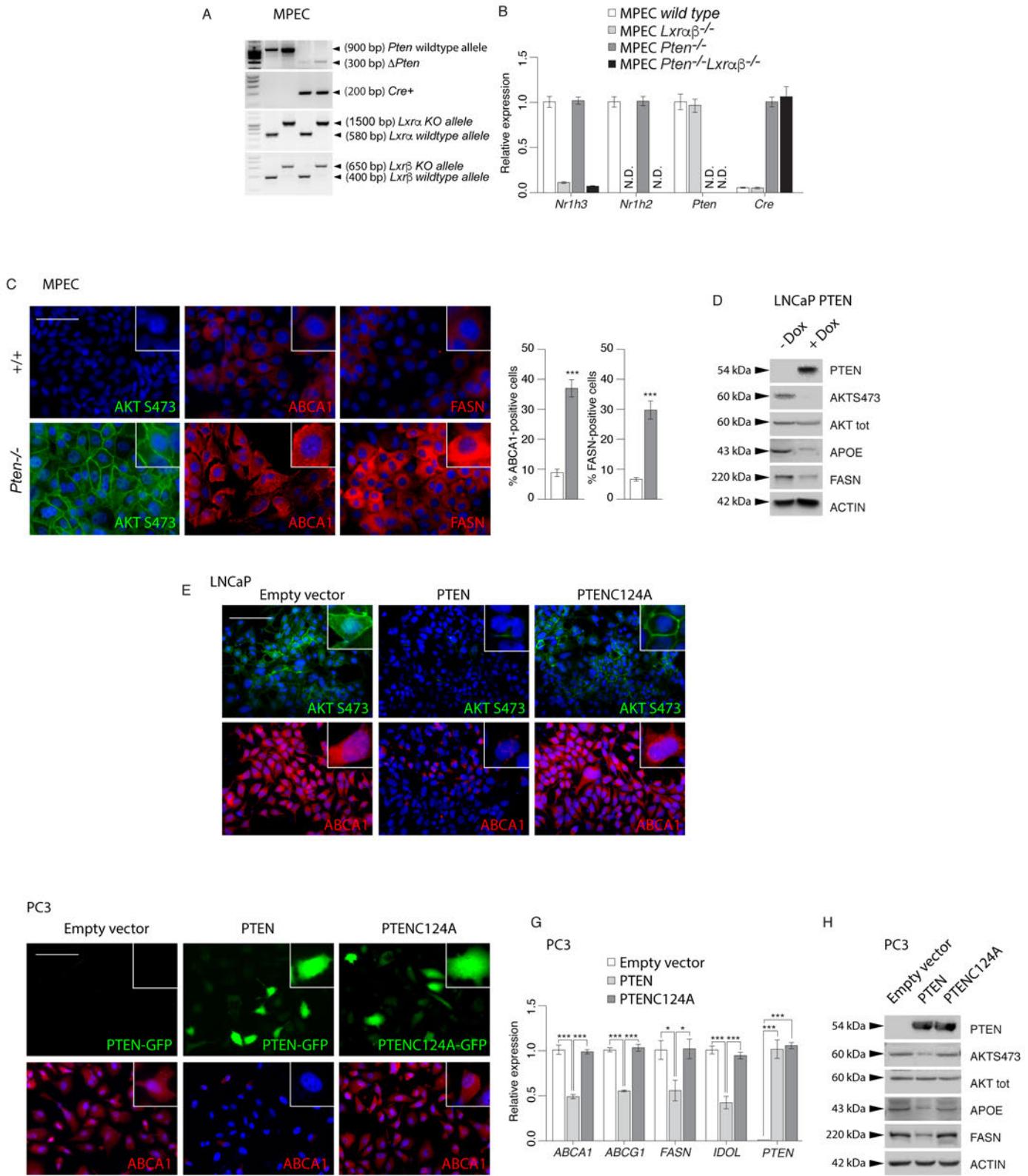
Supplementary Figure 4 | *PtenLxr*-null mutants prostatic phenotype

(A) HE-stained entire sections of representative dorsal prostate (DP) at 8, 11 and 20 weeks from *Pten^{pc-/-}* and *Pten^{pc-/-} Lxra^{β-/-}* mice. Scale bar, 100μm. (B) Histological highlighting of normal acini structures in 8 weeks old. Representative pictures obtained from *Pten^{pc-/-}* and *Pten^{pc-/-} Lxra^{β-/-}* mice prostates, (N=6 per group), scale bar, 100μm. (C-D) Histological evaluation of dorsal lobe lesions, Low-Grade PIN, High-Grade PIN, In situ Carcinoma or Invasive Carcinoma. Three distant sections from each mouse (N=6 per group) were scored, scale bar, 100μm. (E-F) Ki67 and SMA (Smooth Muscle Actin) immunofluorescence performed on 8 weeks old *Pten^{pc-/-}* and *Pten^{pc-/-} Lxra^{β-/-}* prostate specimens and invasive carcinoma frequency analysis (N=6 per group), scale bar, 100μm. All data are represented as mean ± SEM, statistical significance has been analysed using Student's t-test. . * p<0.05; ** p<0.01; *** .p<0.001.



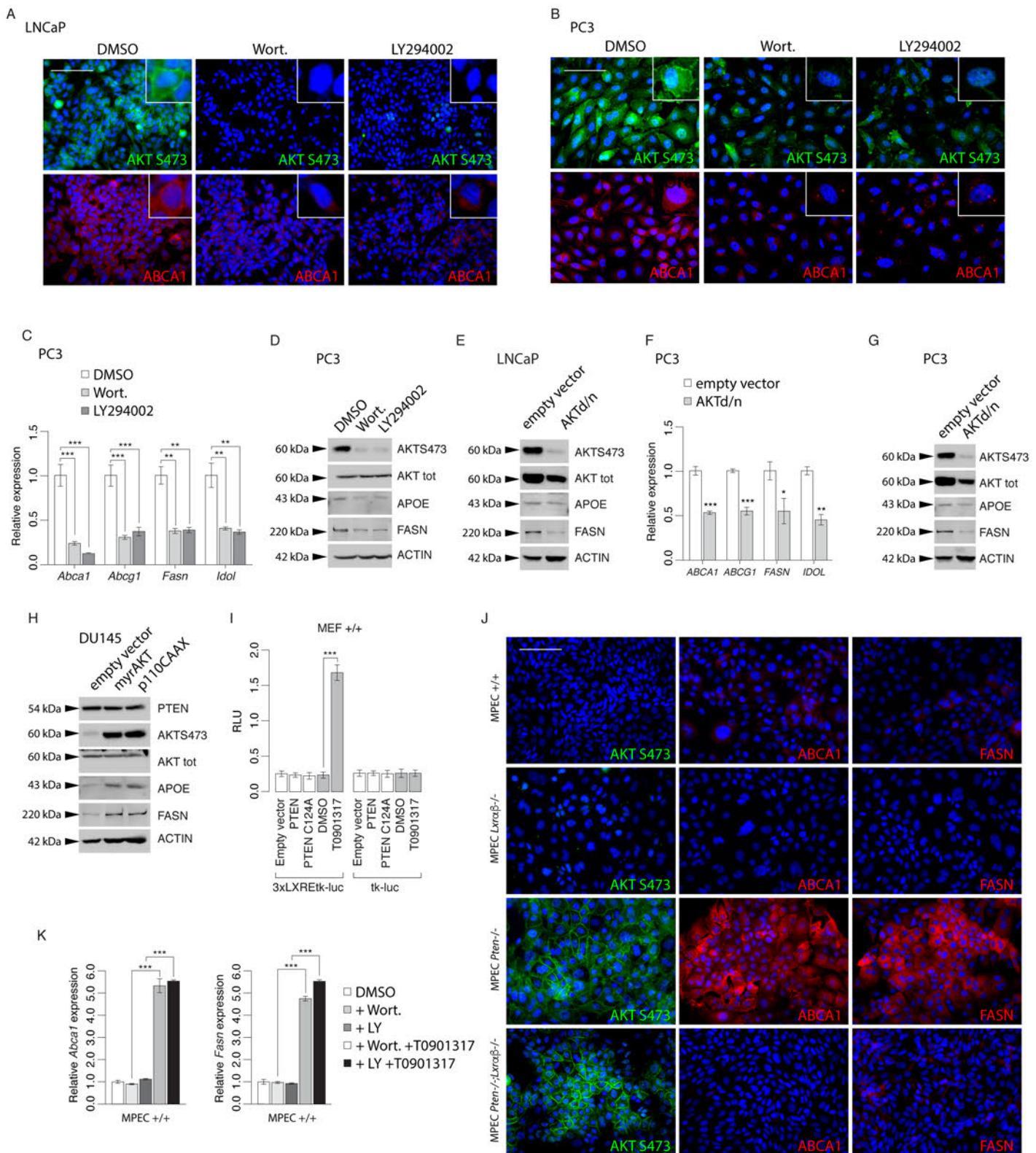
Supplementary Figure 5 | *PtenLxr*-null mutants prostatic phenotype

(A) Representative Ki67 immunohistochemistry on 8 weeks old prostatic tissues from *Pten^{pc-/-}* and *Pten^{pc-/-Lxraβ-/-}* mice and, (B) Quantification of Ki67-positive staining (N=6 per group), scale bar 100μm. (C) Representative and quantitative analysis of Ki67 immunohistochemistry on prostatic tissues from *WT* and *Lxraβ-/-* mice (6-months old, N=8 per group), scale bar 100μm. (D) Relative expression of *Nkx3.1*, *Clu*, *Ki67*, *Ccna2*, *Ccnb2* and *Ccnd2* in prostate from 6 months old *WT*, *Pten^{pc-/-}* and *Pten^{pc-/-Lxraβ-/-}* mice (N = 10/7/8). (E) Gross anatomy of lumbar lymph nodes from *Pten^{pc-/-Lxraβ-/-}* mouse. (F) Representative lymph node and lung prostate metastasis immunofluorescent staining using specific (CK18/PSCA) prostatic markers in 2 months old *Pten^{pc-/-}* and *Pten^{pc-/-Lxraβ-/-}* mice (N=7 per group), scale bar 100μm. (G) Prostate metastasis frequency evaluation. All data are represented as mean ± SEM, statistical significance has been analysed using Student's *t*-test. ***p<0.001.



Supplementary Figure 6 I Expression of LXR targets in PTEN positive/negative cells

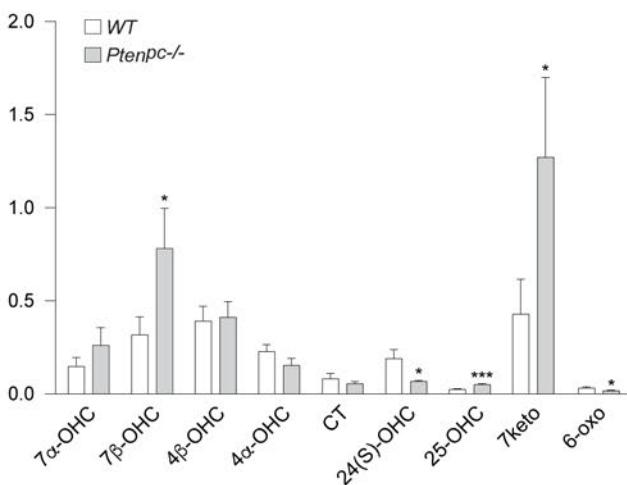
(A) PCR-based identification of mutant MPEC lines for *Pten* wild-type allele, recombination of *Pten*^{loxP} alleles, *Lxra* and *Lxrβ* wild-type or KO alleles, Cre Transgene. (B) Genotype validation using analysis of relative expression of *Nr1h3* (*Lxra*), *Nr1h2* (*Lxrβ*), *Pten* and Cre recombinase in the various MPEC lines. (N.D. not detectable). (C) Immunofluorescence and positive-cell quantification against AKTS473, ABCA1 and FASN in MPEC wild-type (+/+) and *Pten*^{-/-}. Scale bar 100μm (D) PTEN, AKTS473, AKT, APOE, FASN and β-ACTIN protein accumulation levels in LNCaP PTEN in presence or absence of Doxycycline treatment. (E) Immunofluorescence against AKTser473 and ABCA1 in LNCaP cells transfected with PTEN or PTENC124A expression vectors. Scale bar 100μm. (F) Immunofluorescence against ABCA1 in PC3 cells transfected with PTEN or PTENC124A expression vectors. PTEN or PTEN-mutant accumulation is visualized using GFP. Scale bar 100μm (G) Relative expression levels of *Abca1*, *Abcg1*, *Fasn*, *Idol* and *Pten* and (H) PTEN, AKTS473, AKT, APOE, FASN and β-ACTIN protein accumulation levels in PC3 cells transfected with PTEN or PTENC124A vectors. For whole experiments, data are the result of three independent experiments. All the statistical analyses were performed with the Student's *t*-test and are represented as mean ± SEM; * p<0.05; *** p<0.001.



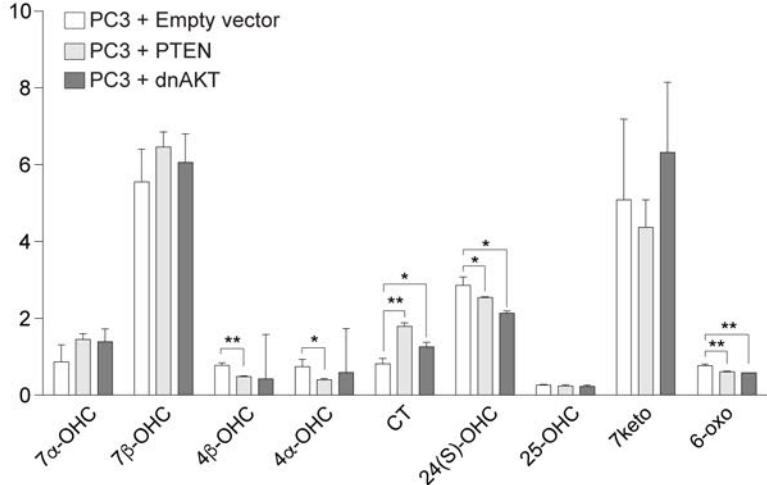
Supplementary Figure 7 | Expression of LXR targets in various PI3K/AKT signaling pathway context

(A,B) Immunofluorescence against AKTS473 and ABCA1 of LNCaP and PC3 cells treated with PI3K inhibitors Wortmannin (0.5 μ M) or LY294002 (20 μ M), scale bar 100 μ m. (C,D) Relative expression and protein accumulations of LXR targets in PC3 cells treated with PI3K inhibitors Wortmannin (0.5 μ M) or LY294002 (20 μ M). (E) Immunoblot against AKTS473, AKT, APOE, FASN and β -ACTIN in LNCaP cells transfected with AKTd/n expression vector. (F) Relative accumulation of ABCA1, ABCG1, FASN and IDOL in PC3 cells transfected with AKTd/n expression vector. (G) Immunoblot against AKTS473, AKT, APOE, FASN and β -ACTIN in PC3 cells transfected with AKTd/n expression vector. (H) Immunoblot against PTEN, AKTS473, AKT, APOE, FASN and β -ACTIN in DU145 cells transfected with myrAKT and p110CAAX expression vectors. (I) Luciferase activity measured in MEF Pten-/- or (J) MEF +/+ transfected with 3xLXREtk-Luc reporter construct or tk-Luc as a control and expression vector encoding PTEN, PTEN C124A mutant treated or not with T0901317 (1 μ M). (J) Immunofluorescence against AKTser473, ABCA1 and FASN on MPEC +/+, Pten-/-, Lxra β -/- or Pten-/-Lxra β -/-, scale bar 100 μ m. (K) Relative accumulation of Abca1 and Fasn in MPEC +/+ treated with DMSO, Wortmannin (0.5 μ M), LY294002 (20 μ M) and/or T0901317 (1 μ M). All the experiments have been done into three independent experimental replicates. All the statistical analyses were performed with the Student's t-test and are represented as mean \pm SEM. * p<0.05; ** p<0.01; *** p<0.001.

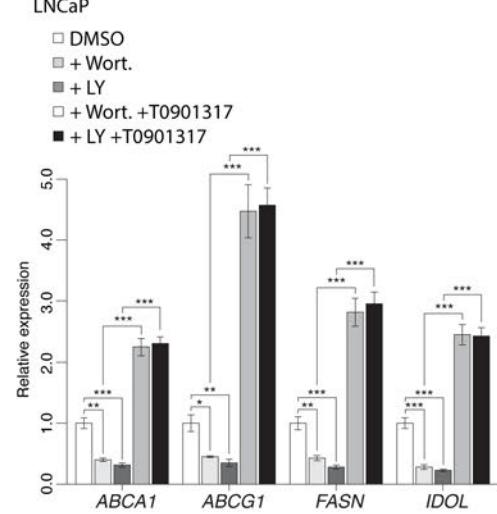
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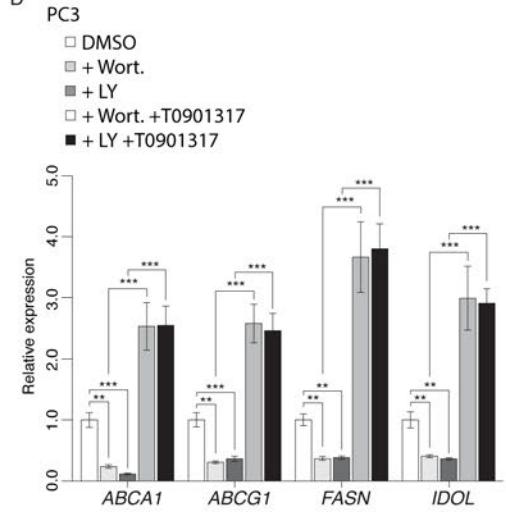
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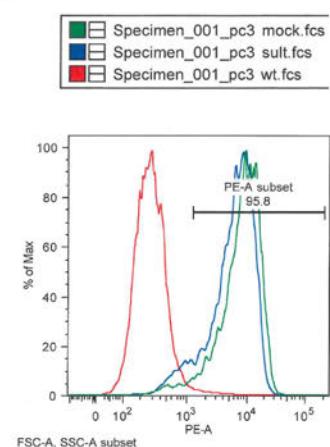
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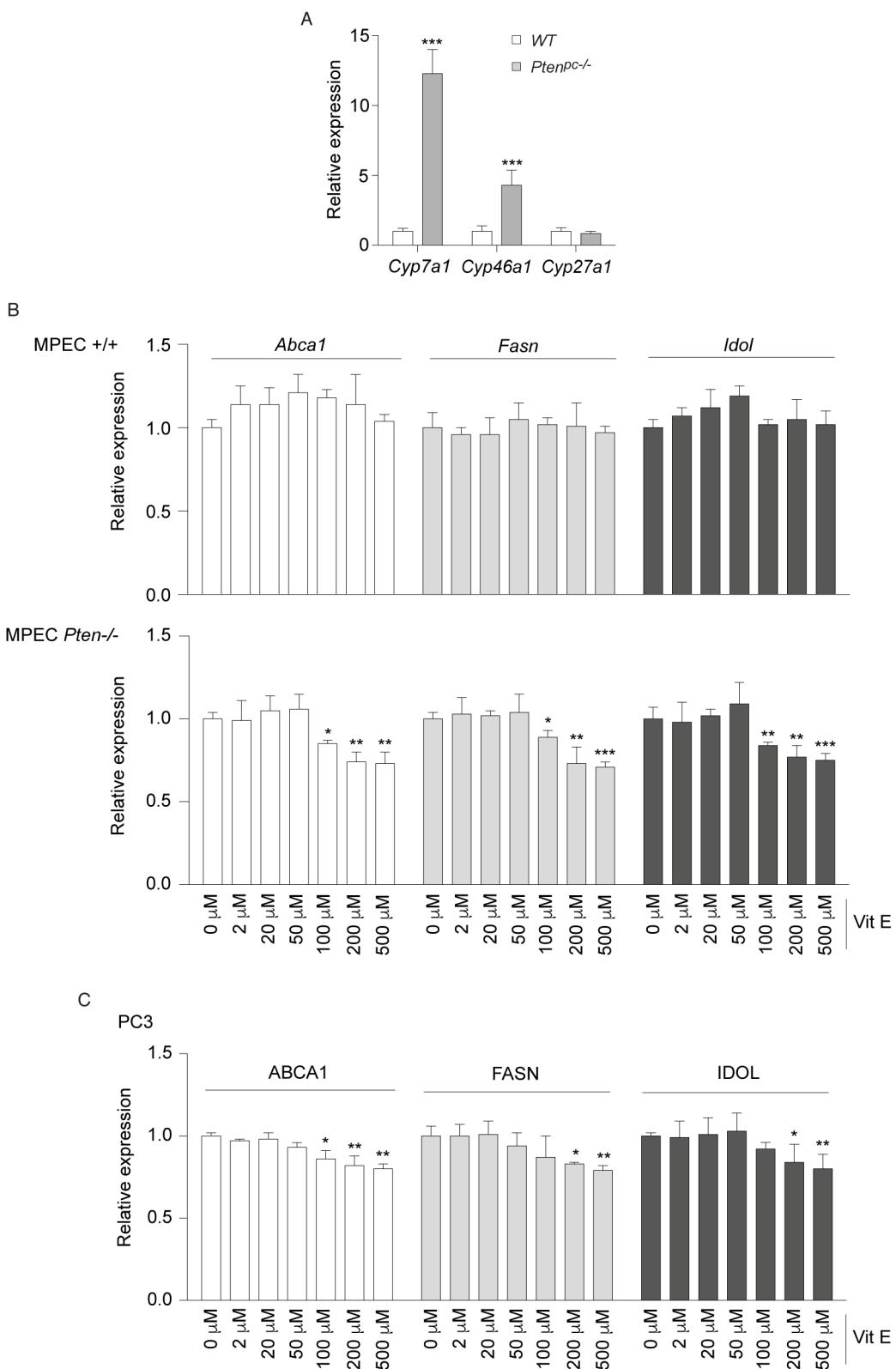


E



Supplementary Figure 8 | Sterol metabolism in PTEN-null context

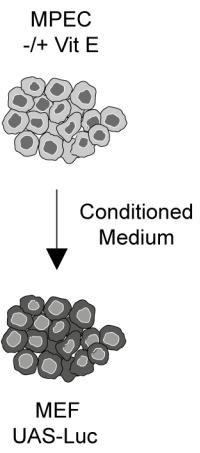
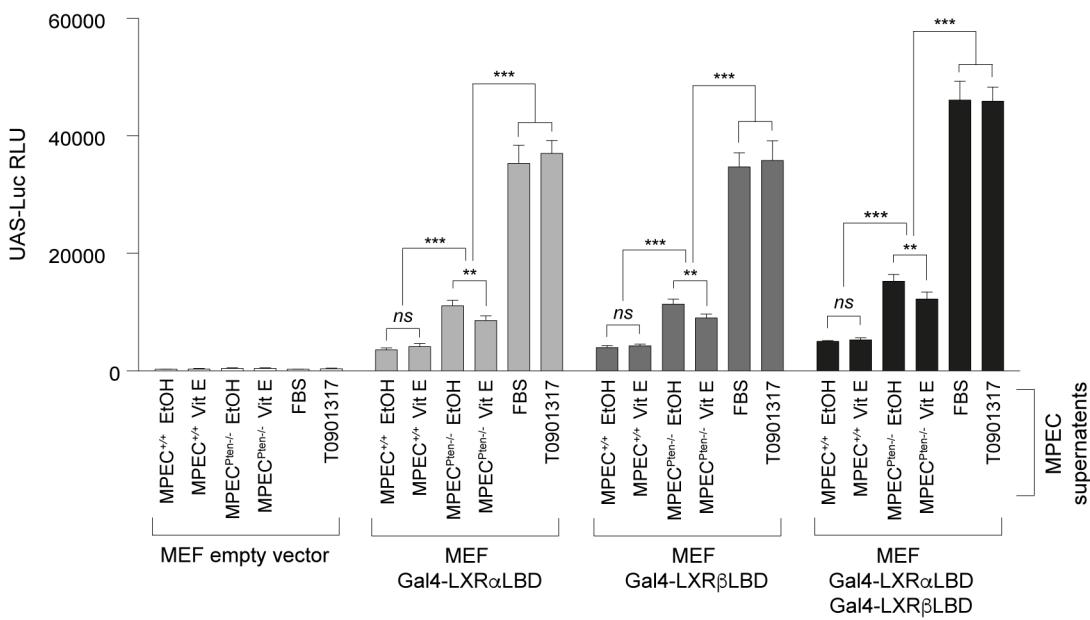
(A) Levels of 7 α -hydroxycholesterol, 7 β -hydroxycholesterol, 4 β -hydroxycholesterol, 4 α -hydroxycholesterol, cholestan-3 β ,5 α ,6 β -triol (CT), 24(S)-hydroxycholesterol, 25-hydroxycholesterol, 7-ketocholesterol, 6-oxo-cholestane-3 β ,5 α -diol in prostatic samples from wild type (WT) and *Ptenpc-/-* mice (N=4 per group) and (B) PC3 cells transfected with empty vector or PTEN and dnAKT-encoding vectors (N=4 per condition). (C,D) Relative expression and protein accumulations of LXR targets in LNCaP and PC3 cells treated with Wortmannin (0.5 μ M), LY294002 (20 μ M) and/or T0901317 (1 μ M), experiments have been performed into three experimental replicates. (E) FACS analysis showing the cell surface marker encoded by the SULT2B1b vector used to quantify the level of transduction. All data are represented as mean \pm SEM and have been analysed using the Student's t-test; * p < 0.05; ** p < 0.01; *** p < 0.001.



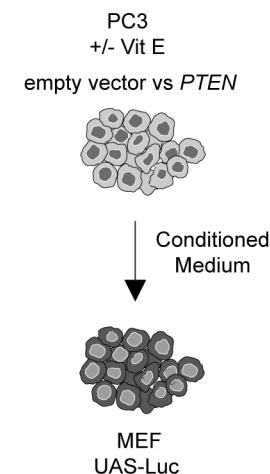
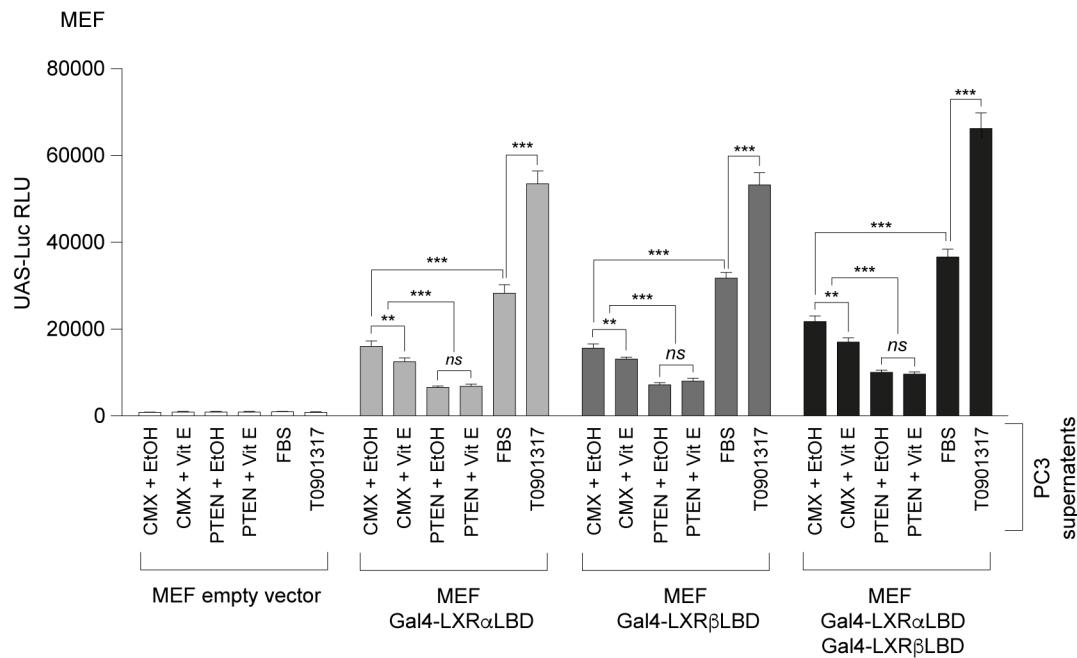
Supplementary Figure 9 | Sterol metabolism in PTEN-null context

(A) Analyse of *Cyp7a1*, *Cyp46a1* and *Cyp27a1* expression by qPCR on dorsal prostate of 6 months old wild type and *Ptenpc-/-* mice. (B-C) LXR target genes expression analyse by qPCR on MPEC +/+ or MPEC *Pten-/-* and PC3 cells treated with increasing concentration of Vitamin E during 24 hours. All data are represented as mean ± SEM, have been performed into three independent experimental replicates, and analysed with Student's *t*-test. . * p<0.05; *** p<0.001.

A

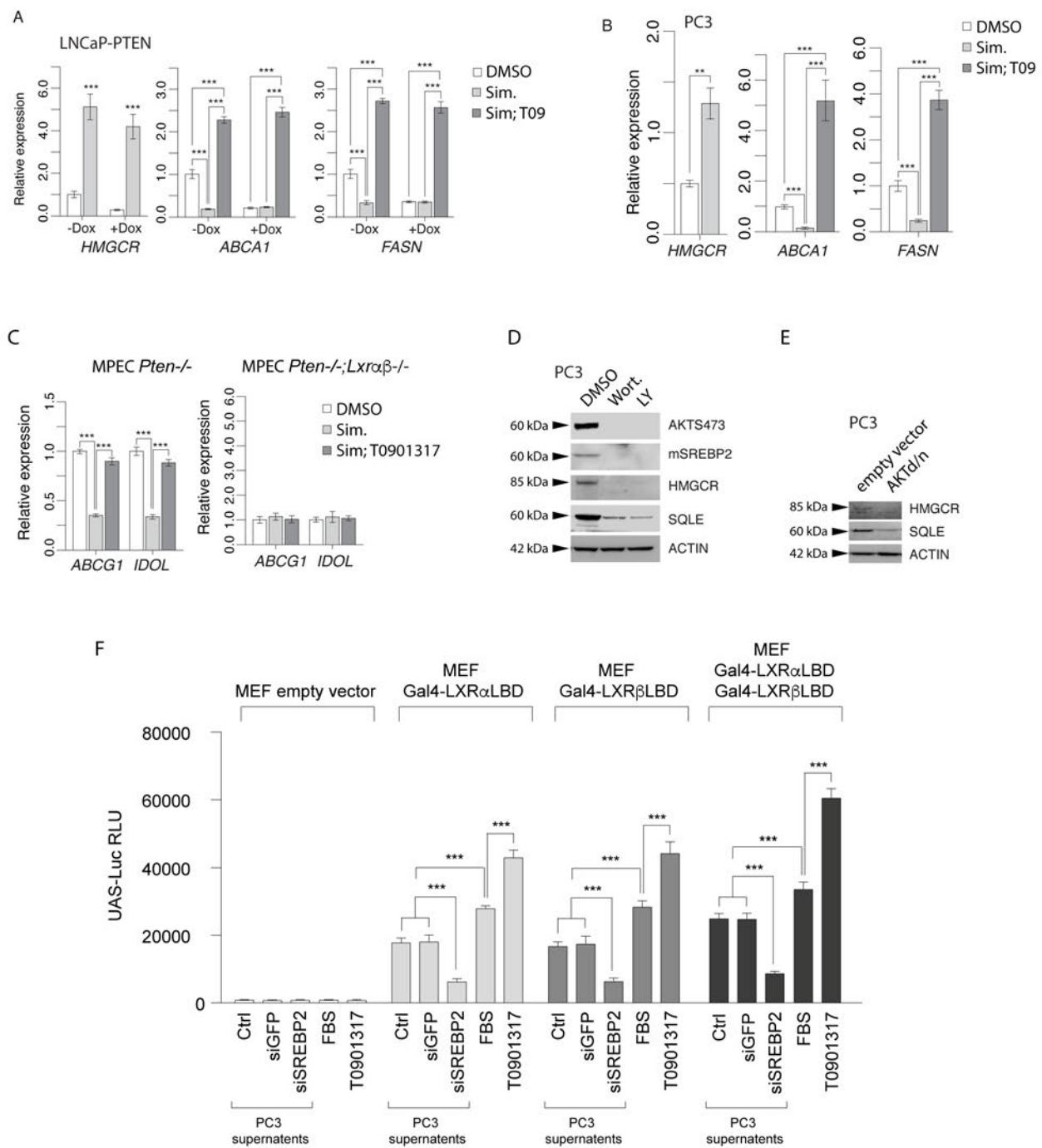


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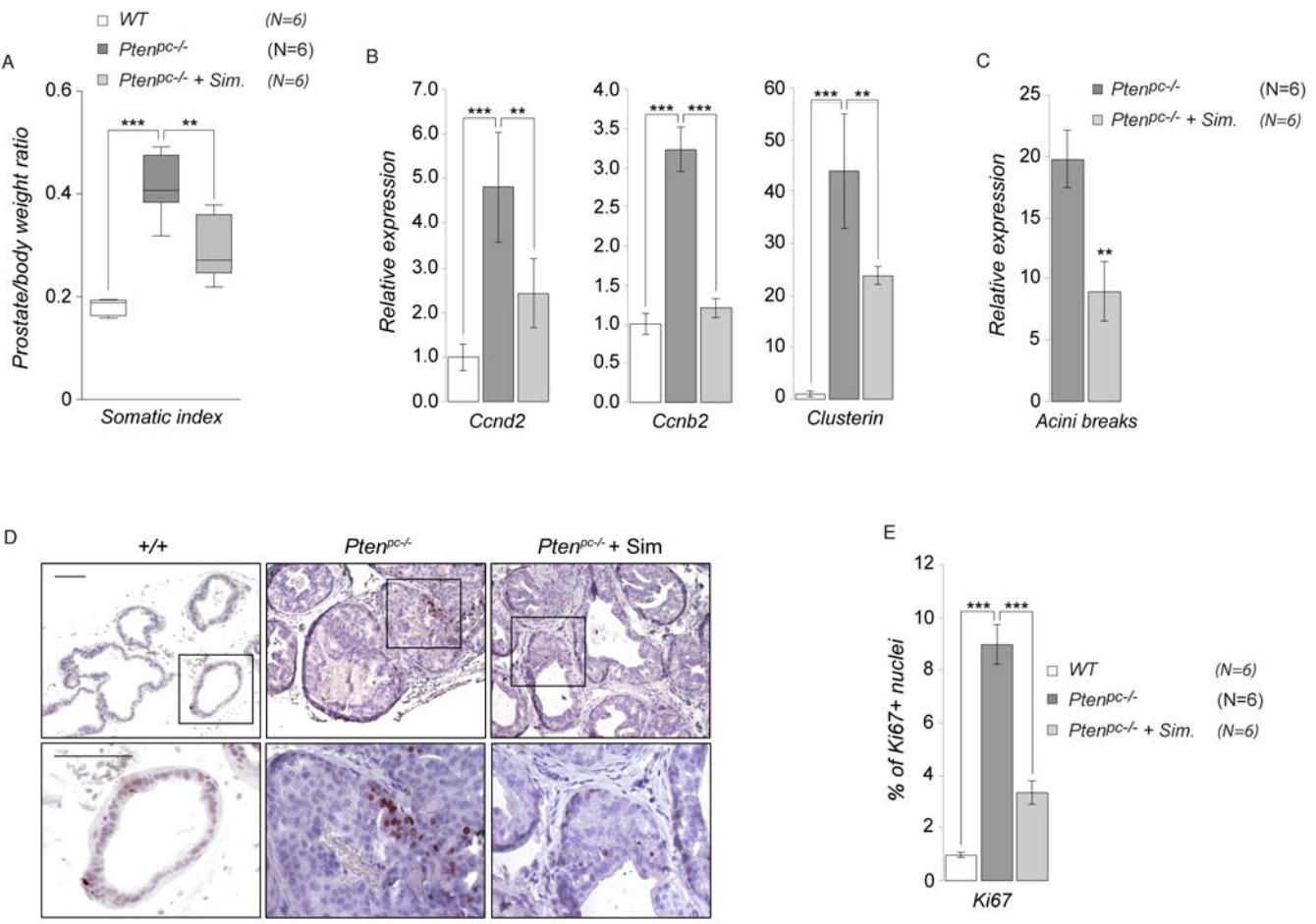
Supplementary Figure 10 | Sterol metabolism in PTEN-null context

(A-B) Luciferase activity measurement in wild type MEF transfected with Gal4-LXR α LBD or/and Gal4-LXR β LBD and UAS-Luciferase after incubation with medium conditioned during 24 hours by MPEC $^{+/+}$, MPEC $Pten^{-/-}$ and PC3 cells treated with EtOH or Vitamin E (200 μ M). FBS and T0901317 were used as controls (N=3 per condition). All data are represented as mean \pm SEM. Student's t-test has been performed. * p < 0.05; *** p < 0.001.



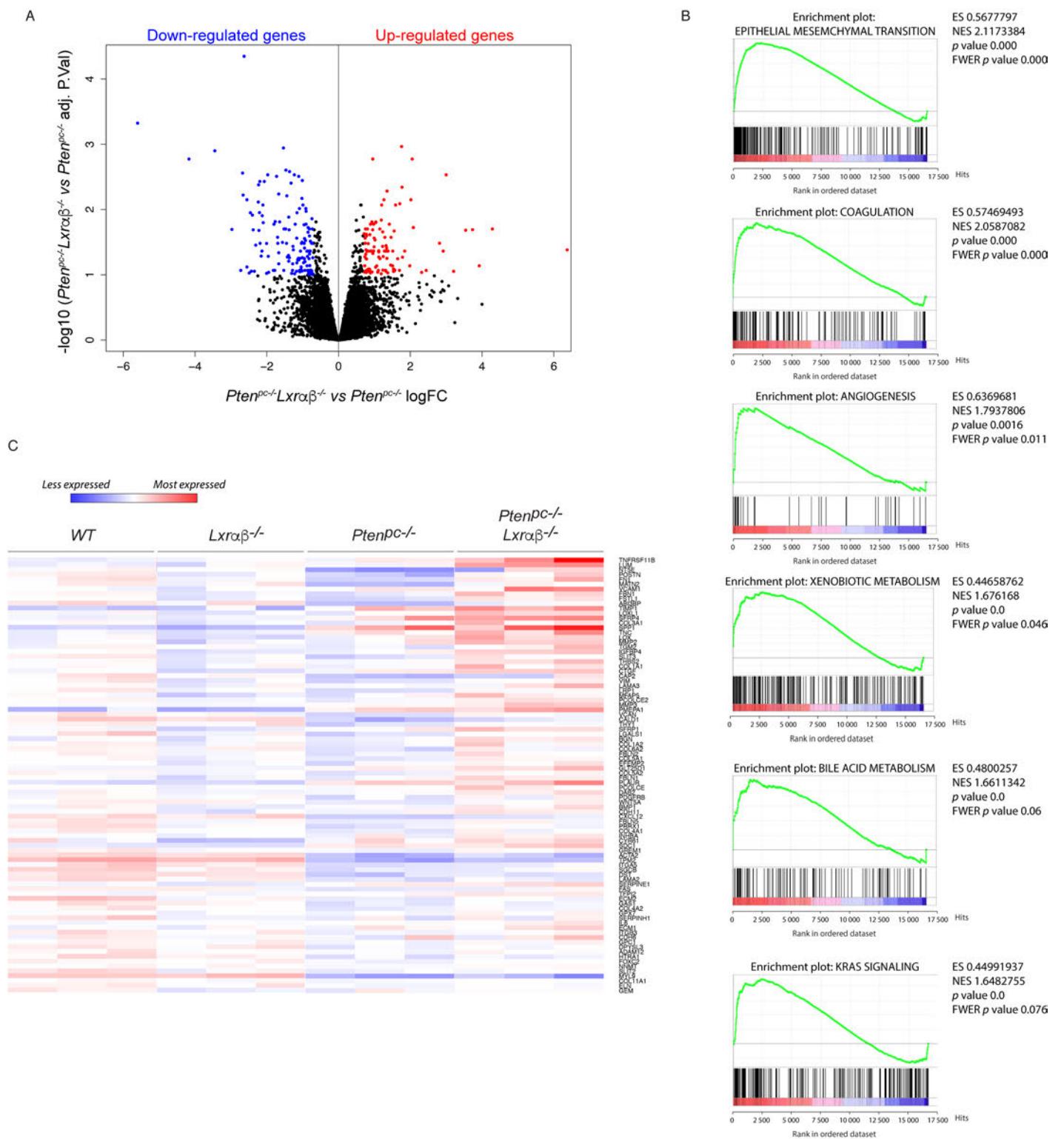
Supplementary Figure 11 | Cholesterol de novo synthesis in PTEN-null context

(A) qPCR analysis of *HMGCR*, *ABCA1* and *FASN* expression in LNCaP PTEN treated with doxycycline (25µM), simvastatin (2,5µM) and/or T0901317 (1µM). (B) qPCR analysis of *HMGCR*, *ABCA1* and *FASN* expression in PC3 cells treated with simvastatin (2,5µM) and/or T0901317 (1µM). (C) *Abcg1* and *Idol* relative expression in MPEC *Pten*^{-/-} and *Pten*^{-/-}; *Lxraβ*^{-/-} treated with DMSO, Simvastatin (2,5µM) and/or T0901317 (1µM). (D) Immunoblot against AKTS473, mature-SREBP2 (mSREBP2), HMGCR, SQLE and β-ACTIN in PC3 cells treated with Wortmannin (0,5µM) or LY294002 (20µM). (E) Immunoblot against HMGCR, SQLE and β-ACTIN in PC3 cells transfected with AKT^{d/n} expression vector. (F) Luciferase activity measurement in wild type MEF transfected with Gal4-LXR α LBD or/and Gal4-LXR β LBD and UAS-Luciferase after incubation with medium conditionned by PC3 cells transfected with Ctrl, siGFP, or siSREBP2. FBS and T0901317 were used as controls. Experiments are the result of three independent biological replicates. All the statistical analyses have been performed with the Student's *t*-test and are represented as mean ± SEM. * p<0.05; ** p<0.01; *** p<0.001.



Supplementary Figure 12 | Cholesterol *de novo* synthesis in PTEN-null context

(A) Relative weight of prostates wild type (WT), Pten^{pc-/-} and Pten^{pc-/-} treated with Simvastatin (Pten^{pc-/-} + Sim), (N= 6/6/6). (B) Relative expression Ccna2, Ccnb2 and Clusterin in prostate from WT, Pten^{pc-/-} and Pten^{pc-/-} + Sim mice. (C) Acini breaks have been quantification using following criteria: discontinuous SMA staining and presence of Ki67-positive staining in surrounding stromal compartment (N = 6/6). (D) Representative Ki67 immunohistochemistry on prostatic tissues from each condition. Scale bar 100μm. (E) Quantification of Ki67-positive staining (N = 6 per group). All data are represented as mean ± SEM and analysed using Student's *t*-test. * p<0.05; *** p<0.001.

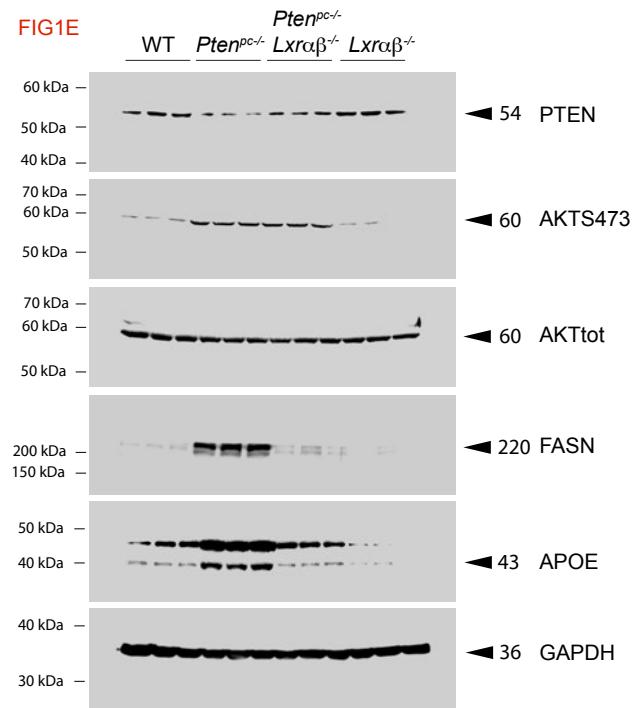


Supplementary Figure 13 | Transcriptome profiling in mice lacking LXR_s and/or PTEN

Supplementary Figure 15: Transcriptome profiling in mice lacking Lxraβ or Pten.

(A) Volcano plot indicates differential gene expression in dorsal prostate samples from *Pten*^{pc-/-} compared with *Pten*^{pc-/-}*Lxraβ*^{-/-} (N=3 per group). Downregulated genes are visualized in blue and upregulated genes in red. (B) GSEA based on MSigDB Hallmark (www.broadinstitute.org) (C) Heatmap shows gene expression of Epithelial Mesenchymal Transition cluster in dorsal prostate samples from WT, *Lxraβ*^{-/-}, *Pten*^{pc-/-}, *Pten*^{pc-/-}*Lxraβ*^{-/-} mice (N=3 per group).

FIG1E



Supplementary Figure 14 I related figure is indicated in red.
Uncropped scans of western blot with molecular weight markers.

FIG 3B

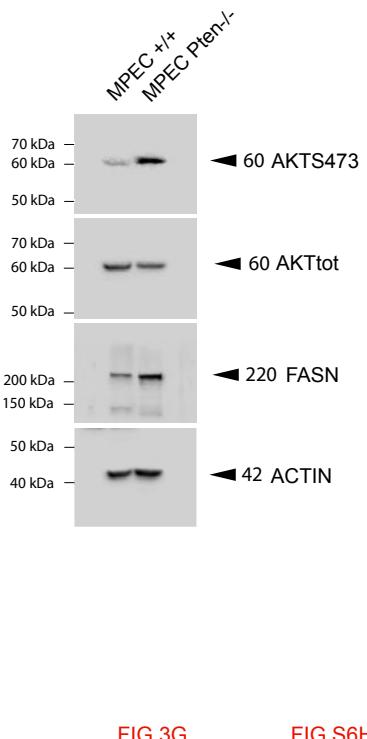


FIG S6D

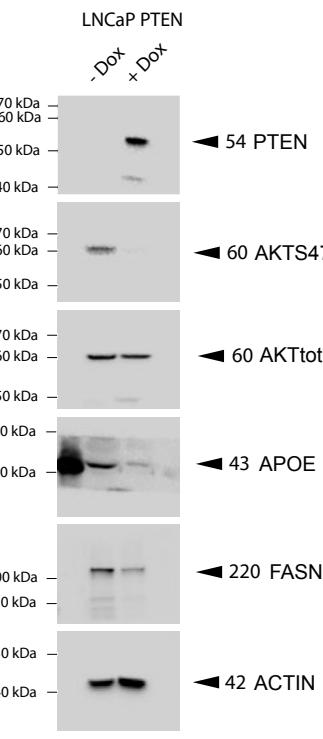


FIG 3I

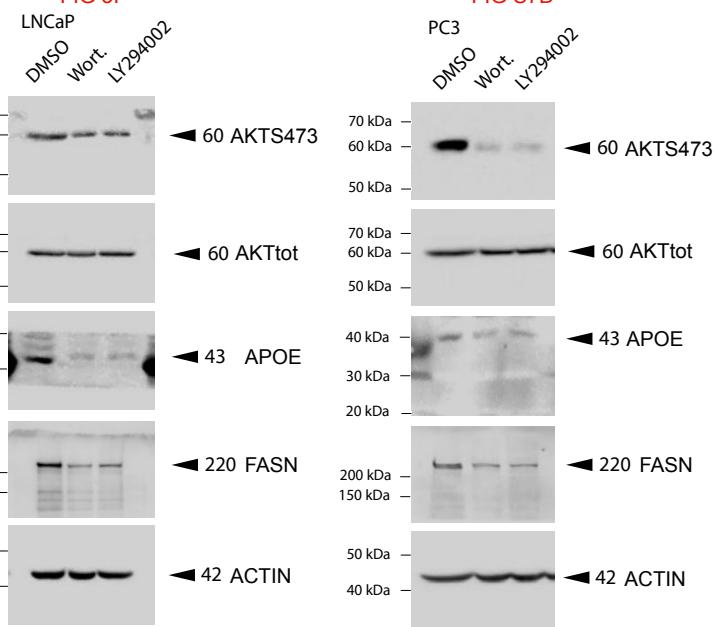


FIG S7D

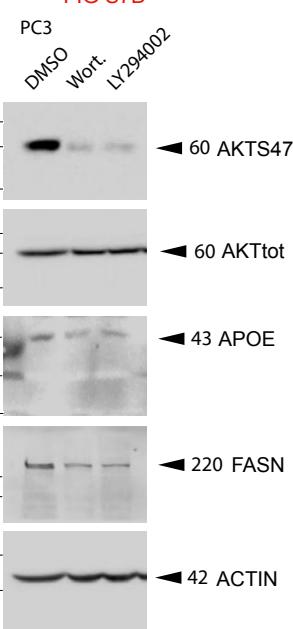


FIG 3G

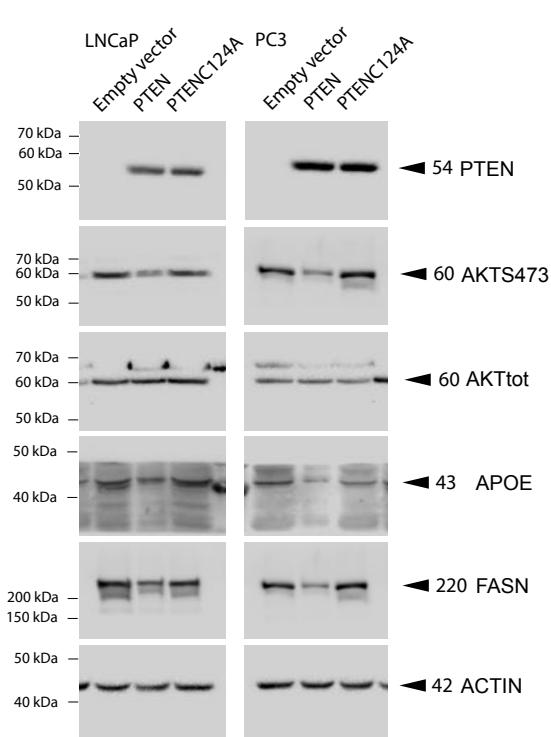


FIG S6H

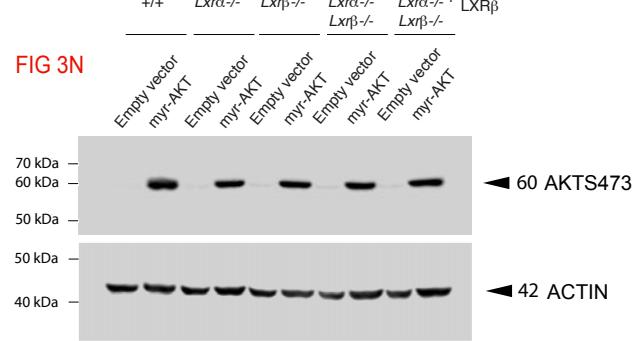


FIG 3N

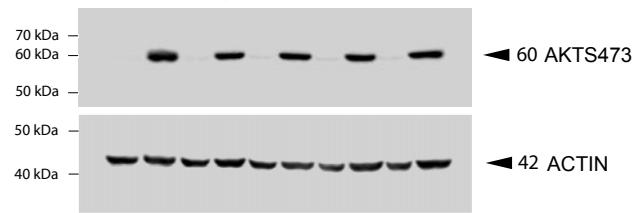


FIG S7E/G

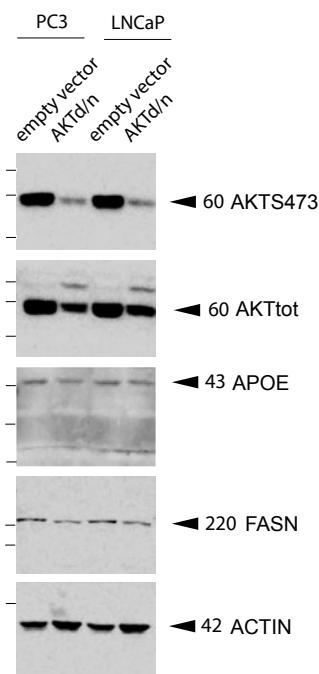


FIG S7H

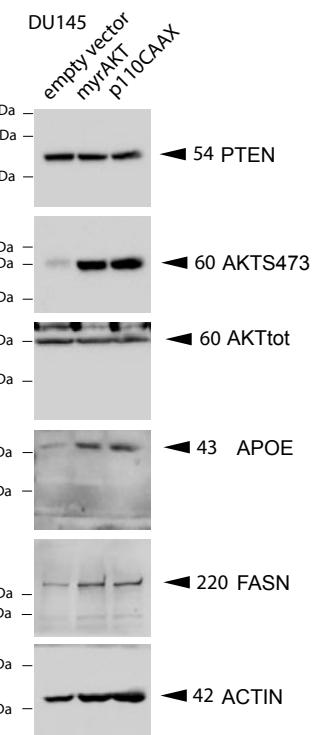
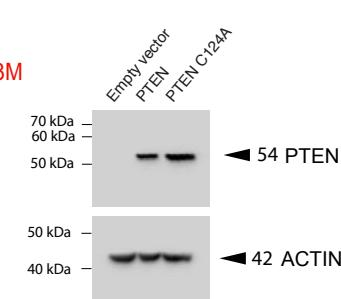
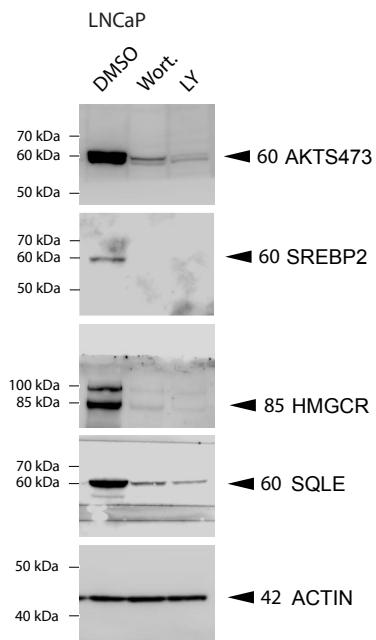
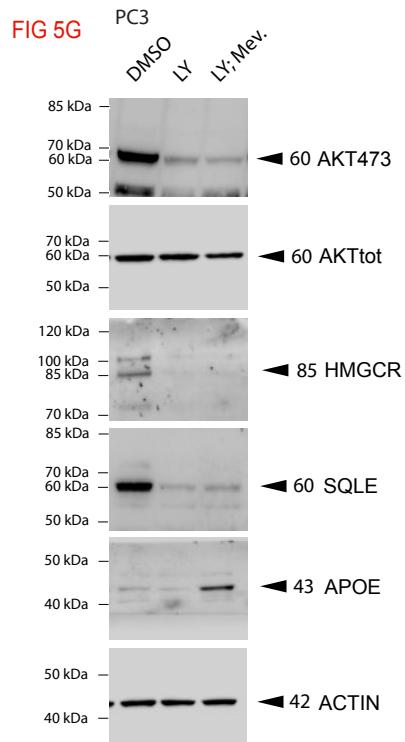
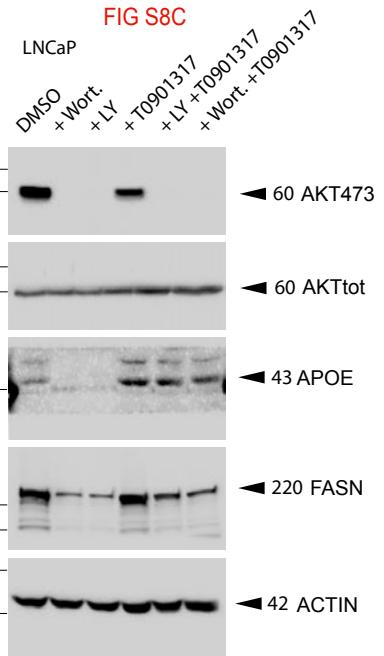
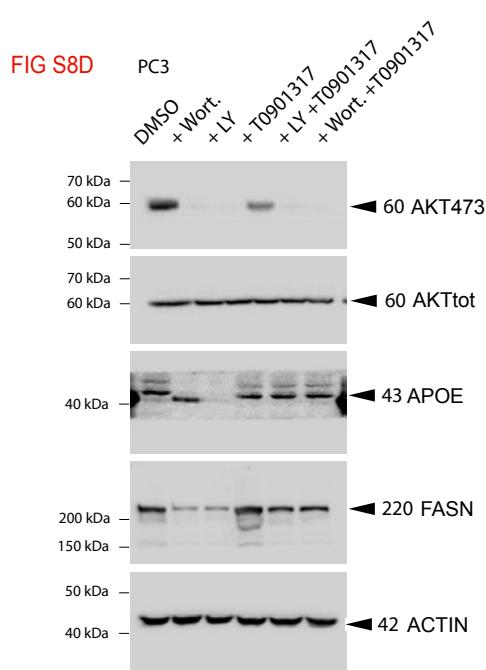
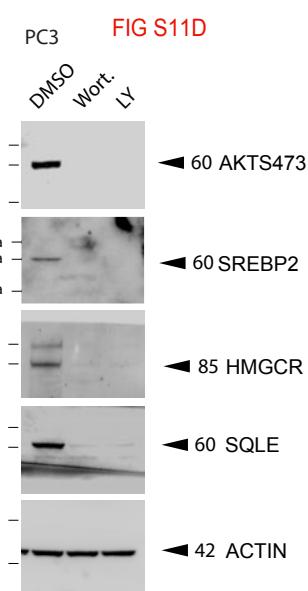
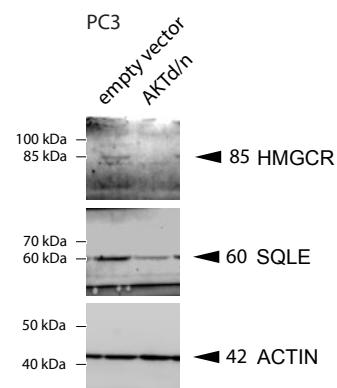


FIG 3M

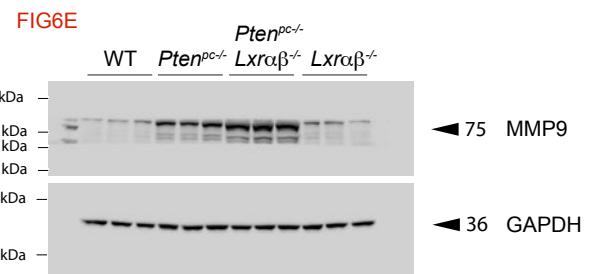
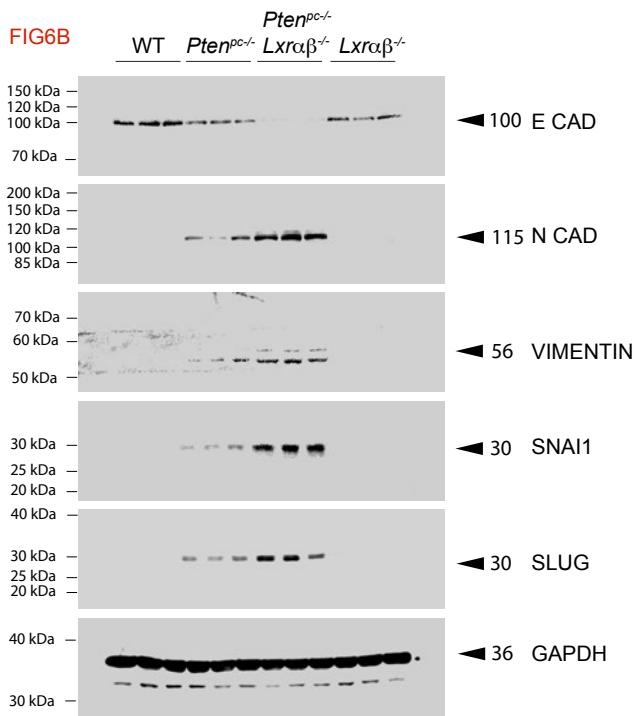


Supplementary Figure 14 (continued) I related figure is indicated in red.

Uncropped scans of western blot with molecular weight markers.

FIG 5F**FIG 5G****FIG S8C****FIG S8D****FIG S11D****FIG S11E**

Supplementary Figure 14 (continued) I related figure is indicated in red.
Uncropped scans of western blot with molecular weight markers.



Supplementary Figure 14 (continued) I related figure is indicated in red.
Uncropped scans of western blot with molecular weight markers.

FIG S6H complement.

PC3

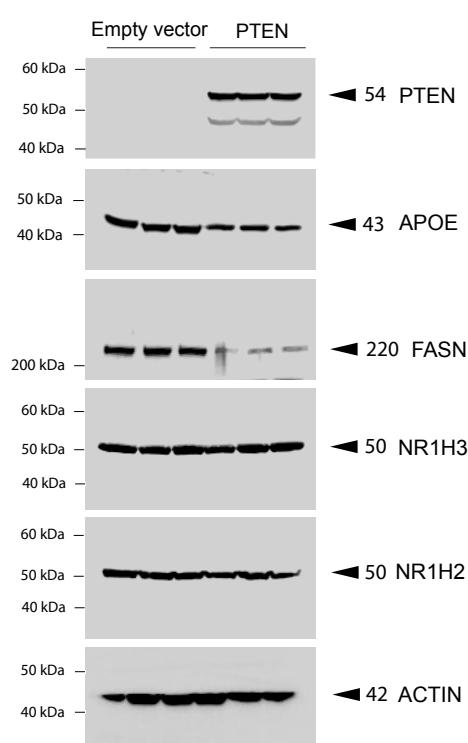
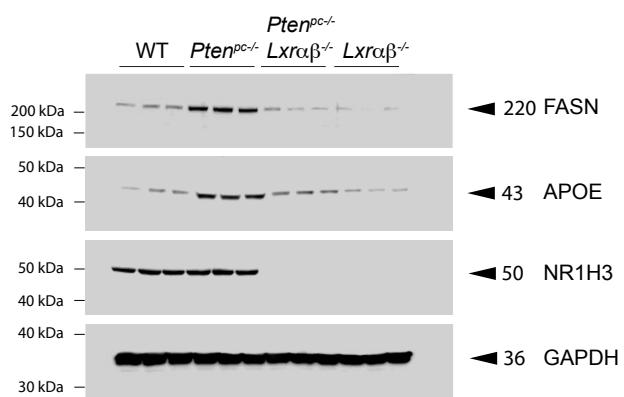


FIG S2D



Supplementary Figure 14 (continued) I related figure is indicated in red.
Uncropped scans of western blot with molecular weight markers.

<i>Antibody</i>	<i>Dilution</i>	<i>Manufacturer</i>	<i>Reference</i>
APOE	1/500	Gift From A. Mazur	---
pAKTS473	1/1000	Abcam	Ab9271
β -ACTIN	1/2000	Sigma-Aldrich	A2066
GAPDH	1/15000	Novus Biologicals	NB300221
AKT1	1/1000	Cell Signaling Tech	#2967
SLUG	1/500	Cell Signaling Tech	#9585
ZEB1	1/500	Cell Signaling Tech	#3396
FASN	1/500	Santa cruz	SC-20140
PTEN	1/1000	Cell Signaling Tech	#138G6
SNAI1	1/500	Cell Signaling Tech	#3879
VIMENTIN	1/500	Santa cruz	SC-5141
MMP9	1/1000	Abcam	Ab38898
E-CAD	1/500	Cell Signaling Tech	#3195
N-CAD	1/500	Cell Signaling Tech	#4061
SREBP2	1/200	BD Biosciences	BD557037
SQLE	1/500	AP proteintech	12544
HMGCR	1/500	Gift From N. Zelcer	none
LXR α (human)	1/200	PPMX	PP-PPZ0412-10
LXR β (human)	1/200	PPMX	PP-K8917-10
Lxra (mouse)	1/500	Personal production	---

Supplementary Table 1: List of antibodies

Antibodies used for western blot analysis.

ABCA1	1/200	Direct Alexa	Novus	NB 400-105
pAKTS473	1/100	Direct Alexa	Abcam	Ab9271
β -ACTIN	1/200	Direct Alexa	Sigma-Aldrich	A2066
CK18	1/200	TSA amplification	Santa cruz	SC-28264
PSCA	1/50	Direct Alexa	Santa cruz	SC-28819
PCNA	1/100	Direct Alexa	Santa cruz	SC-7907
Ki67	1/500	Novared amplification	Spring Bioscience Corp.	M3062
FASN	1/100	Direct Alexa	Santa cruz	SC-20140
PTEN	1/100	TSA amplification	Cell Signaling Tech	#138G6
SNAI1	1/100	Direct Alexa	Cell Signaling Tech	#3879
VIMENTIN	1/100	Direct Alexa	Santa cruz	SC-5141
MMP9	1/300	Direct Alexa	Abcam	Ab38898

Supplementary Table 2: List of antibodies

Antibodies used for immunofluorescence and immunohistochemistry analysis.

Mouse primers	Forward	Reverse
ABCA1	GGAGCTGGGAAGTCAACAAAC	ACATGCTCTTCCCGTCAG
ABCG1	GACCTTCCTACTCTGTACCCG	TTCATGAGTGTGGACTTCCCAG
IDOL	TACCGAGCCATCACCGAAAC	CCCTCCTGGCATGGTCATAG
APOE	TCTGACCAGGTCCAGGAAGAG	CATCAGTGCCGTAGTTCTG
FASN	AGCGGCCATTCCATTGCC	CCATGCCAGAGGGTGGTTG
ACACA	TTTCACATTCCGAGCAAGGGA	TTAGCAGCCCCAAGGTACAG
SCD1	CATCATTCTCATGGTCCTGCT	CCCATTCGTACACGTCTTCT
SCD2	TGCAAGCTCTACACCTGTCTC	GGCAATGATGAGGAAGAGCCT
RARB2	AGCTCCAAGAACCACTGCTG	GATGCTCGGGAGATCTGTGA
RXRG	GGCAGAGGAGGCCAGAGCGA	GGGGATGCGTTGGCCCACT
PPARA	GGGAAAGACCAGCAACAAACC	ATCGGACCTCTGCCTCTTG
ABCB10	CCCAAGCGAGGGCTATGGCG	GAATGCCGTTGGCAGCAGCG
NR1H2	AAGCAGGTGCCAGGGTTCT	TGCATTCTGTCTCGTGGTTGT
NR1H3	AGGAGTGTGCACTTCGAAA	CTCTTCTGCCGCTTCAGTTT
PTEN	CGCGCGGGAGGACAAGTTC	TCTGAGGTTCCCTCTGGTCCTGGT
SCD5	CCCAAGCTGGAGTACGTCTG	TGCTTATAGGTTGGTGGCT
ENG	GGTGTCTCTGGTCCTCGTTT	CAAAGGAGGTGACAATGCTGG
NKX3.1	ATTGTTCCGTGTCCCTTGT	ACTGATTGACGAAACAGGACAGA
CLUST	ACTGTGTGCAAGGAGATCCG	GTTAGCCTGGCAGGATTGT
KI67	TAGAGGATCTGCCTGGCTTC	TGTCCTGGTTGGTTCTCC
CCNA2	ATGTCAACCCCGAAAAACTG	TAAGCTCAGCTGCCCTCTTC
CCNB2	GGCTTCTGCAGGAAACTCTG	TTTCTCGGATTGGGAACCTG
CCND2	TCCCGCAGTGTCTTCTATT	CTGGGGCTTCACAGAGTTGT
ZEB1	CCGGCTCTACTCTAACAC	CCTCCACTGTACCATCAGTC
ZEB2	GTAACACGTCACTCCGCCCC	CAGGCTCGATCTGTGAAGTC
TWIST1	CCACTAGCAGCGGAGCTCC	GCTCCAGAGTCTCTAGACTGTC
TWIST2	CCATGTCCGCCTCCACTAG	GGGTCACTGAGGAGCCACAAGG
SNAI1	TGGAAAGGCCTCTCTAGGC	GCCTGGCACTGGTATCTCTT
VIMENTIN	TGGCACGTCTGACCTTGAA	CTGTCCTGAATCTGGCCT
NCADH	GTTTACAGCGCAGTCTTACC	AGCTTCTCACAGCATACACC
ECADH	ACGTCCATGTGTGACTGTG	AGGAGCAGCAGGATCAGAAC
MMP1	AGGGGAGAGGTGTTTCTTCA	TAGCTTCATAAGCAGCGTCAA
MMP2	ACAGTGACACCACTGTGACAA	GGTCAGTGGCTGGGTATC
MMP7	ATGGGCCAGGGAACACTCTA	GTGGCCAATTATGGGTGG
MMP9	CGCTCATGTACCCGCTGTAT	CCGTGGGAGGTATAGGGGA
SREBP2	GCTCTGTGCTGTGAAACCT	ACAGACTCTGGCACGATT
HMGCR	CTTGTGAATGCCTGTGATTG	AGCCGAAGCAGCACATGAT
SQS	TCTGCCACGGATGGGTGT	TTCCCACCAGCCCAGCAACG
HMGCS1	TGACATGCTCTCCGAGTACC	CAGGAACATCCGAGCTAGAG
ABCG5	TGGATCCAACACCTCTATGCTAA	GGCAGGTTTCTCGATGAAC
ABCG8	ATCGGCAACTTCACCTCTC	CTGATGCCGATGACAATGAG
GLUT4	CGGACACTCCATCTGGGG	GGCCACCGATGGAGACATAGC
APOC1	GGATGGAGGCTTCTCATCGCT	GTTCCGGACAAATCCGGGG
APOC2	GGAGGTTGCCAAAGACCTG	CTTGCCTGGCAGCTACTCTC
LPL	GATGGCAAGAACACAAACCA	TGTCCACCTCCGTGTAATC
CHREBP	TGGCAATGCTGACATGATCCA	GGGGCGGTAATTGGTGAAGA
TIMP2	GTTTATCTACACGGCCCCCTA	TCTGGGTGATGCTAAGCGTG
FDPS	TCTGGACCCCGGGAGAAC	TGTAGGAAACCAAGCCACCTC
SQL	TCTCAGAATGGTCGTCTGCG	ACCAGTAAGAGGGTGCCTCA
CYP7A1	AGCAACTAAAGAACCTGCCAGTACTA	GTCCGGATATTCAAGGATGCA
CYP46A1	CACGGGTGTCTGTCCATCTG	AATGTGACTATGGCGCTGG
CYP27A1	GCCTCACCTATGGGATCTCA	TCAAAGCCTGACCGAGATG

Human primers	Forward	Reverse
ABCA1	GCACTGAGGAAGATGCTGAAA	AGTTCCCTGGAAGGTCTTGTTCAC
ABCG1	CAGGAAGATTAGACACTGTGG	GAAAGGGAAATGGAGAGAAG
IDOL	CGAGGACTGCCTCAACCA	TGCAGTCCAAAATAGTCAACTTCT
FASN	CCCCAACCTGAGATCCCA	TTGATGCCACGTTGCC
SCD1	CTTGCATATGCTGTGGTGC	TGGTGGTAGTTGTGGAAGGC
RXRG	CCCAGTGAGTGCCCCACCGA	CCGGGGCTGGTGGATGGGTA
PPARA	TCATCCTCTCAGGAAAGGCCA	GACGGTCTCCACTGACGTG
ABCB10	CCTTGTTTGAGCGTGGTG	GCCTCTTCCTTGCTAACTG
NR1H2	AACAAACGCTCCTTCTCCGA	GGTGATAACACTCTGTCTCGT
NR1H3	AGGAGTGTGGCTTCGCAAA	CTCTTCTGCGCTTCAGTTT
PTEN	ATTCCCAGTCAGAGGCGCTA	CACCTTAGCTGGCAGACCA
SCD5	ATTCTGGCTGTCGCCAAC	GTCAGCATCCGTCCTGAGT
ENG	GCGGTGGTCAATATCCTGTC	GGAAGTGTGGCTGAGGTAG
SREBP2	GAGACCATGGAGACCCTCAC	GGAGCTACACAGCTGTTCTGA
HMGCR	TATGCCCATCCCTGTTGGAG	CACCACCCACCCTCCTATC
SQS	ACCAAACAGTGATTGCCGAC	ACCAGCCCAGCAACATAGTG
HMGCS1	CCGAAGGAGGAAACAGTGACA	AGGGCAACAATTCCCACATCT
ABCG5	GCCGACTGTGCATGACTGCTC	TTACATTCTGGGTCCGCTCAG
ABCG8	CCGGGGCTTCATGATAAACT	CTGAGGCCAATGACGATGAGGTA
FDPS	CTCCCAGATCGTTAGGGTGC	GCTCCCGGAATGCTACTACC
SQS	ACCAAACAGTGATTGCCGAC	ACCAGCCCAGCAACATAGTG
SQLE	TTATCATCGTGGGAGCTGGC	TGGGCATCAAGACCTCCAC

Supplementary Table 3: List of primers

Primer sequences used for RT-qPCR analysis in mouse and human samples.