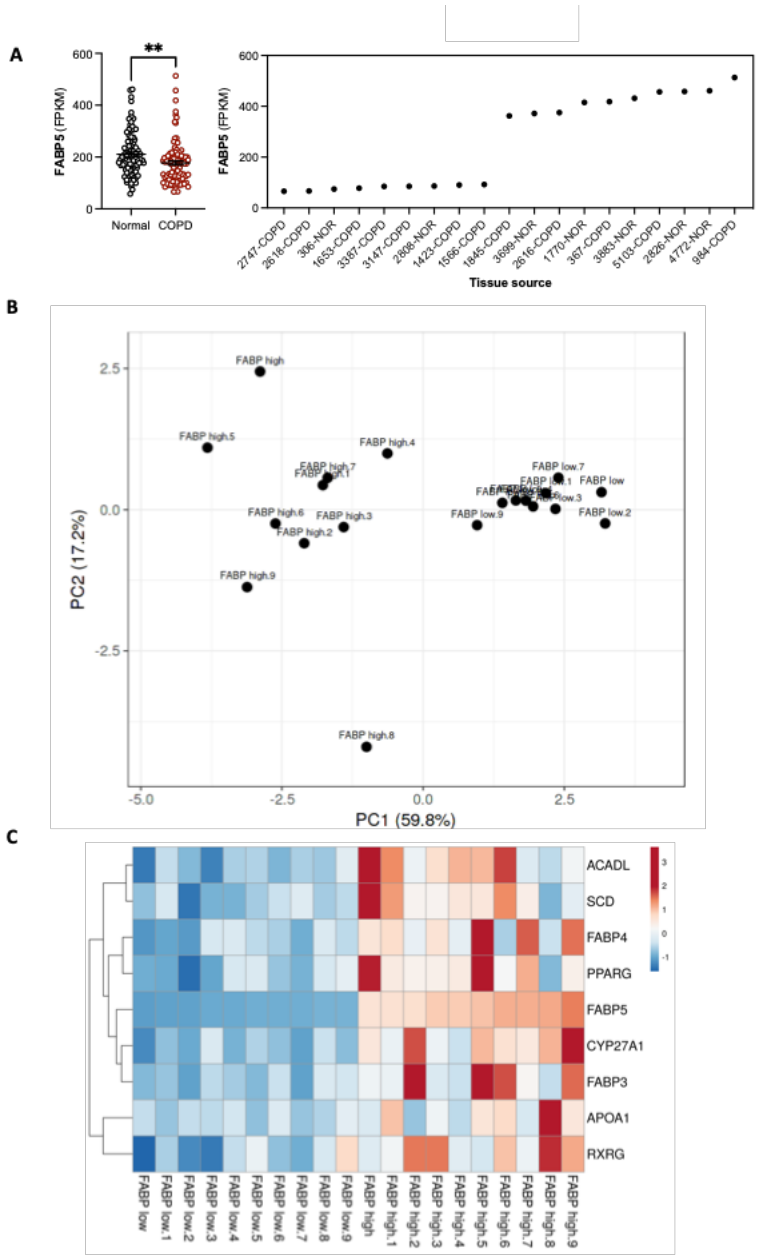
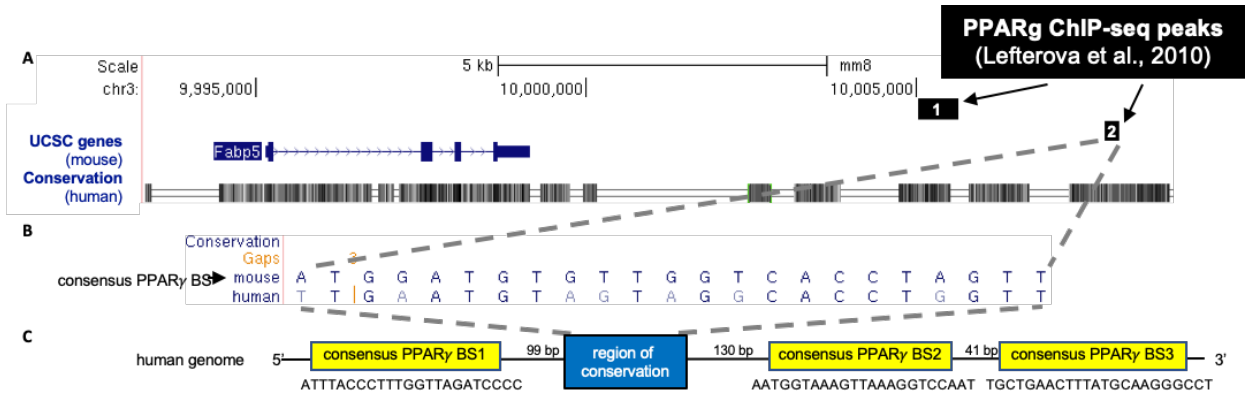


Suppl. Fig. 1 Segregation of samples into two groups based on *FABP5* mRNA levels from RNA-seq data available in the NCBI Gene Expression Omnibus (GEO Accession #GSE57148) from a study examining lung tissues of healthy and COPD patients [27]. **A.** Expression levels of *FABP5* in all samples (left) indicating that overall *FABP5* is decreased in COPD and in selected 10 lowest ($FABP5^{low}$) and 10 highest ($FABP5^{high}$) (right) as FPKM: fragments per kilobase of exon per million fragments mapped between subjects with normal lung function (NOR) and COPD subjects. ** $p<0.01$. **B.** Principle Components Analysis (PCA) of gene transcription indicates

significant separation by FABP5 expression level. **C.** Gene expression heatmap of PPAR signaling pathway genes from FABP5^{high} and FABP5^{low} human lung samples identified by KEGG pathway analysis.



Suppl. Fig. 2 Evidence for direct transcriptional regulation of FABP5 by PPARγ. A. PPARγ ChIP-seq peaks, shown as black boxes, were identified within 10 kb downstream of the *Fabp5* coding region. **B.** Conservation of PPARγ ChIP-seq peak 2 between mouse and human genomes. **C.** Three PPARγ binding sites (BS, indicated by yellow boxes) were found within ~200 bp of the region of conservation (indicated by blue box) between mouse and human genomes.

Suppl. Table 1. Antibody list used for Western blot and Immunofluorescence.

Antibody	Application	Source	Identifier
Monoclonal anti-Flag (R) M2-Peroxidase (HRP)	Western blot, primary No secondary needed	Sigma	Cat# A8592
Rabbit anti-Myc-Tag	Western blot, primary	Cell Signaling	Cat# 2272S
Rat anti-Human FABP5/E-FABP	Western blot & Immunofluorescence, primary	R&D	MAB3077
Goat anti-Rabbit HRP	Western blot, secondary	Zymax	Cat# 81-6120
Goat anti-Rat IgG(H+L) HRP	Western blot, secondary	Pierce	Cat# 31470
Goat anti-Mouse Fabp5/e-fabp	Immunofluorescence, primary	R&D	AF1476
Rabbit anti-PPARγ	Immunofluorescence, primary	Cell Signaling	Cat# 2443
Mouse IgG1 anti-CD68	Immunofluorescence, primary	Abcam	ab955
Goat anti-Rabbit IgG, Alexa Fluor 488	Immunofluorescence, secondary	Invitrogen	A-11008
Goat anti-Rat IgG, Alexa Fluor 568	Immunofluorescence, secondary	Invitrogen	A-11077
Rabbit anti-Goat IgG, Alexa Fluor 568	Immunofluorescence, secondary	Invitrogen	A-11079
Donkey anti-Mouse IgG1, Alexa Fluor 647	Immunofluorescence, secondary	Invitrogen	A-32787

Suppl. Table 2. ChIP-qPCR primer sequences.

	Forward Sequence (5' to 3')	Reverse Sequence (3' to 5')
Binding Site 1 (BS1)	AATATTTACCCTTTGGTTAGATCCC	CTTTGTGAAGCCAGCTTTGT
Binding Site 2 (BS2)	GGGAGATGTTTGTTCTAAAGTTAATCC	GTTCAGCAATGAGAAAGAGCAAA
Binding Site 3 (BS3)	GCTCTTTCTCATTGCTGAACTTTAT	CACTCCGGTGACAGTAAGAATG
Positive Control (PC)	GGGTTTGAAGCAAAGGGAAAG	GTCATCCTGCCTCCATTCTT