

Supporting Information

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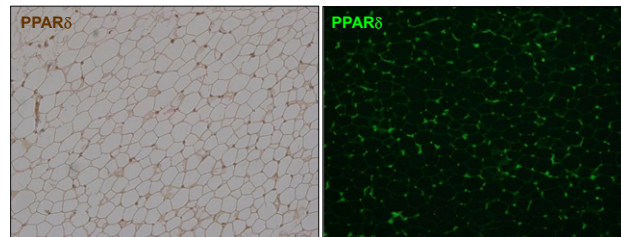


Fig. S1. Adipocytes express peroxisome proliferator-activated receptor delta (PPAR δ). Immunohistochemical (Left) and immunofluorescent (Right) staining for PPAR δ in adipose tissue.

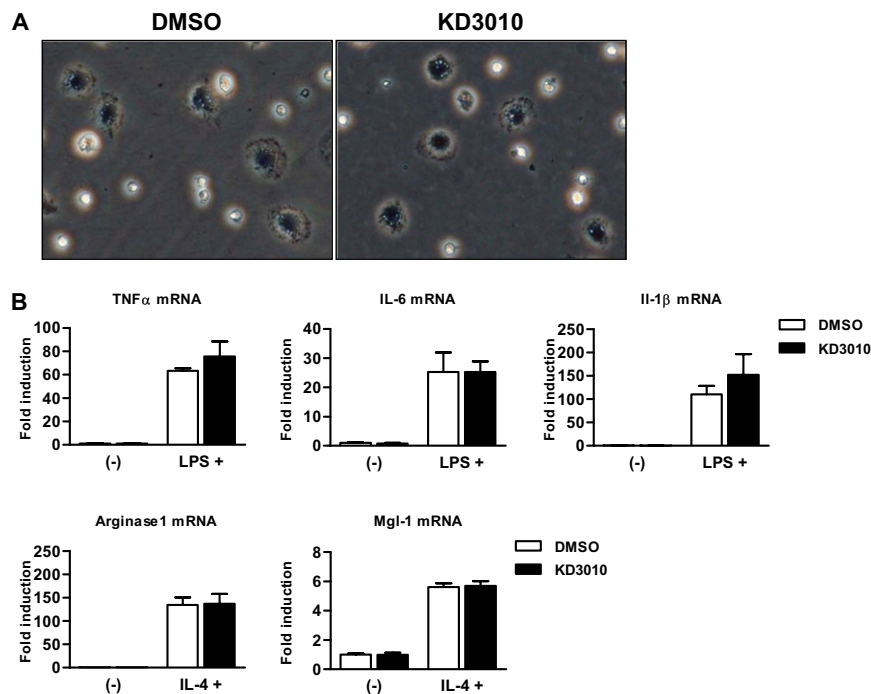


Fig. S2. Effect of KD3010 on Kupffer cells. (A) The morphology of cultured Kupffer cells treated with KD3010 for 1 d did not change compared with DMSO-incubated cells. (B) LPS-stimulated expression of M1 markers (*TNF α* , *IL-6*, and *IL-1 β*) and IL-4-induced expression of M2 markers, arginase1 and macrophage galactose-type C-type lectin 1 (*Mgl-1*) in Kupffer cells cultured with KD3010 was analyzed by quantitative PCR and normalized to 18S.

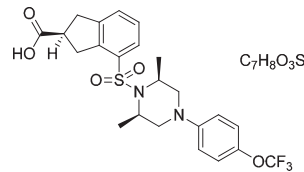


Fig. S5. Structure of KD3010.

Table S1. Up-regulated genes in cultured hepatocytes incubated with GW501516

	Gene symbol	Control (DMSO) signal	GW501516 signal	Fold change	Gene annotation
1	<i>Pdk4</i>	631	3110	4.93	Pyruvate dehydrogenase kinase, isoenzyme 4 (Pdk4), mRNA
2	<i>Adfp</i>	1721	5410	3.14	Adipose differentiation related protein (Adfp), mRNA
3	<i>Creb3l3</i>	706	2129	3.02	cAMP responsive element binding protein 3-like 3 (Creb3l3), mRNA
4	<i>2310016C08Rik</i>	2264	5712	2.52	RIKEN cDNA 2310016C08 gene (2310016C08Rik), mRNA
5	<i>Hmgcs2</i>	1685	3529	2.09	3-Hydroxy-3-methylglutaryl-Coenzyme A synthase 2 (Hmgcs2), nuclear gene encoding mitochondrial protein, mRNA
6	<i>Aadacl1</i>	1008	2080	2.06	Arylacetamide deacetylase-like 1 (Aadacl1), mRNA
7	<i>Ehhadh</i>	393	669	1.70	Enoyl-Coenzyme A, hydratase/3-hydroxyacyl Coenzyme A dehydrogenase (Ehhadh), mRNA
8	<i>Cpt2</i>	1399	2290	1.64	Carnitine palmitoyltransferase 2 (Cpt2), mRNA
9	<i>Acaa1b</i>	4060	6543	1.61	Acetyl-Coenzyme A acyltransferase 1B (Acaa1b), mRNA
11	<i>E130016E03Rik</i>	454	713	1.57	RIKEN cDNA E130016E03 gene (E130016E03Rik), mRNA
12	<i>Ctgf</i>	12460	18879	1.52	Connective tissue growth factor (Ctgf), mRNA
13	<i>Gm2a</i>	1594	2412	1.51	GM2 ganglioside activator protein (Gm2a), mRNA

Comparative DNA microarray data of hepatocytes cultured with DMSO or GW501516 (100nM), showing the top 13 genes whose expression were up-regulated in hepatocytes cultured with GW501516 compared with control.

Table S2. Up-regulated genes in cultured hepatocytes incubated with KD3010

	Gene symbol	Control (DMSO) signal	KD3010 signal	Fold change	Gene annotation
1	<i>Adfp</i>	1721	6577	3.82	Adipose differentiation related protein (Adfp), mRNA
2	<i>Creb3l3</i>	706	2215	3.14	cAMP responsive element binding protein 3-like 3 (Creb3l3), mRNA
3	<i>2310016C08Rik</i>	2264	6431	2.84	RIKEN cDNA 2310016C08 gene (2310016C08Rik), mRNA
4	<i>Pdk4</i>	631	1732	2.74	Pyruvate dehydrogenase kinase, isoenzyme 4 (Pdk4), mRNA
5	<i>E130016E03Rik</i>	454	934	2.06	RIKEN cDNA E130016E03 gene (E130016E03Rik), mRNA
6	<i>Aadacl1</i>	1008	1925	1.91	Arylacetamide deacetylase-like 1 (Aadacl1), mRNA
7	<i>Adora2b</i>	1136	2026	1.78	Adenosine A2b receptor (Adora2b), mRNA
8	<i>4632417N05Rik</i>	1212	2026	1.67	RIKEN cDNA 4632417N05 gene (4632417N05Rik), mRNA
9	<i>Cpt2</i>	1399	2270	1.62	Carnitine palmitoyltransferase 2 (Cpt2), mRNA
10	<i>Hist1h1c</i>	2231	3540	1.59	Histone cluster 1, H1c (Hist1h1c), mRNA
11	<i>Nol5a</i>	1803	2827	1.57	Nucleolar protein 5A (Nol5a), mRNA
12	<i>Fcgrt</i>	1245	1946	1.56	Fc receptor, IgG, alpha chain transporter (Fcgrt), mRNA
13	<i>Vim</i>	975	1523	1.56	Vimentin (Vim), mRNA

Comparative DNA microarray data of hepatocytes cultured with DMSO or KD3010 (5µM), showing the top 13 genes whose expression were up-regulated in hepatocytes cultured with KD3010 compared with control.