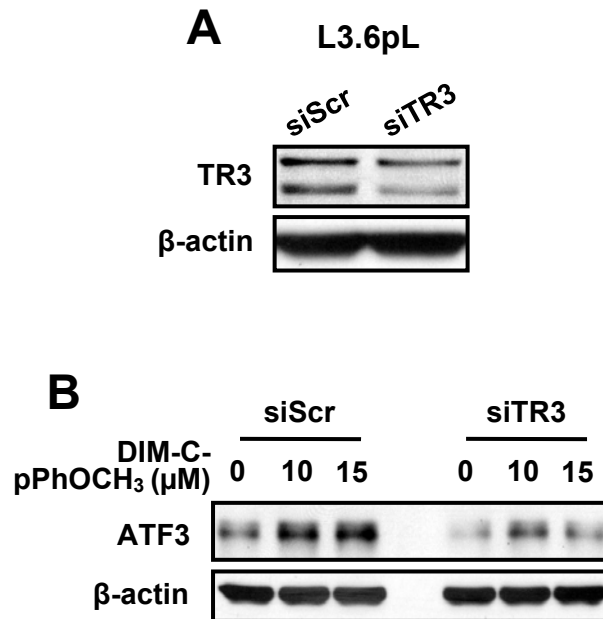


**Supplementary Table 1.** Induction of different classes of genes by DIM-C-pPhOCH<sub>3</sub> in L3.6pl cells using the Amersham Biosciences CodeLink human whole genome array.

Description	Genbank	Relative expression	
		2 h/DMSO	6 h/DMSO
<b>Metabolism/homeostasis</b>			
<i>Asparagine synthase; ASNS</i>	NM_001673	3.12	4.10
<i>Dehydrogenase/reductase (SDR family) member 9; DHRS9</i>	NM_005771	1.49	4.83
<i>DIP2 disco-interacting protein 2 homolog C; DIP2C</i>	BF726674	5.36	2.46
<i>Glutamine-fructose-6-phosphate transaminase 1; GFPT1</i>	NM_002056	0.91	2.58
<i>Heme oxygenase (decycling); HMOX1</i>	NM_002133	1.41	2.87
<i>Homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1; HERPUD1</i>	NM_014685	1.40	5.09
<i>Hyaluronan synthase 3; HAS3</i>	NM_005329	3.03	2.57
<i>Insulin induced gene 1; INSIG1</i>	NM_198336	2.07	2.60
<i>3-Ketodihydrosphingosine reductase; KDSR</i>	BQ279242	2.93	4.17
<i>Methylene tetrahydrofolate dehydrogenase (NAD+- dependent), methenyltetrahydrofolate cyclohydrolase; MTHFD2</i>	NM_006636	1.33	2.64
<i>Ornithine decarboxylase 1; ODC1</i>	NM_002539	2.21	2.96
<i>Prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase); PTGS2</i>	NM_000963	4.22	6.38
<i>TCDD-inducible poly(ADP-ribose) polymerase; TIPARP</i>	NM_015508	3.36	1.88
<i>Thioredoxin reductase 1</i>	NM_003330	3.43	4.18
<i>Very low density lipoprotein receptor; VLDLR</i>	NM_003383	1.06	2.88
<b>Signal transduction</b>			
<i>ADP-ribosylation factor-like 5B; ARL5B</i>	NM_178815	2.85	1.62
<i>Adrenomedullin 2; ADM2</i>	NM_024866	0.93	3.22
<i>Amphiregulin; AREG</i>	NM_001657	3.01	3.68
<i>Cholinergic receptor, muscarinic 2; CHRM2</i>	A1221812	1.32	3.33
<i>Connective tissue growth factor; CTGF</i>	NM_001901	6.64	0.62
<i>Diphtheria toxin receptor (heparin-binding epidermal growth factor-like growth factor); HBEGF</i>	NM_001945	3.46	6.03
<i>Epiregulin; EREG</i>	NM_001432	3.06	3.5
<i>Forkhead box C2 (MFH-1, mesenchyme forkhead 1); FOXC2</i>	BF589934	2.62	1.36
<i>GTP binding protein overexpressed in skeletal muscle; GEM</i>	NM_005261	7.1	1.17
<i>Inhibin, beta A; INHBA</i>	NM_002192	2.77	2.70
<i>Interleukin 11; IL11</i>	NM_000641	3.19	2.59
<i>Jun oncogene; JUN</i>	NM_002228	3.78	2.27
<i>Mitogen-activated protein kinase kinase kinase 8; MAP3K8</i>	NM_005204	3.21	1.31
<i>Plasminogen activator, urokinase; PLAU</i>	NM_002658	2.69	2.91
<i>Plasminogen activator, urokinase receptor; PLAUR</i>	NM_002659	3.10	2.81
<i>Protein tyrosine phosphatase, receptor type, E; PTPRE</i>	NM_006504	2.31	4.51
<i>Ras, dexamethasone-induced 1; RASD1</i>	NM_016084	5.32	3.32
<i>Rho GTPase activating protein 15; ARHGAP15</i>	NM_018460	2.92	1.7
<i>Stanniocalcin 2; STC2</i>	NM_003714	2.06	4.73
<i>Transmembrane protein 2; TMEM2</i>	NM_013390	4.24	2.53
<i>Tribbles homolog 1; TRIB1</i>	NM_025195	4.57	3.9
<i>Wingless-type MMTV integration site family member 9A; WNT9A</i>	BF222744	4.43	3.31

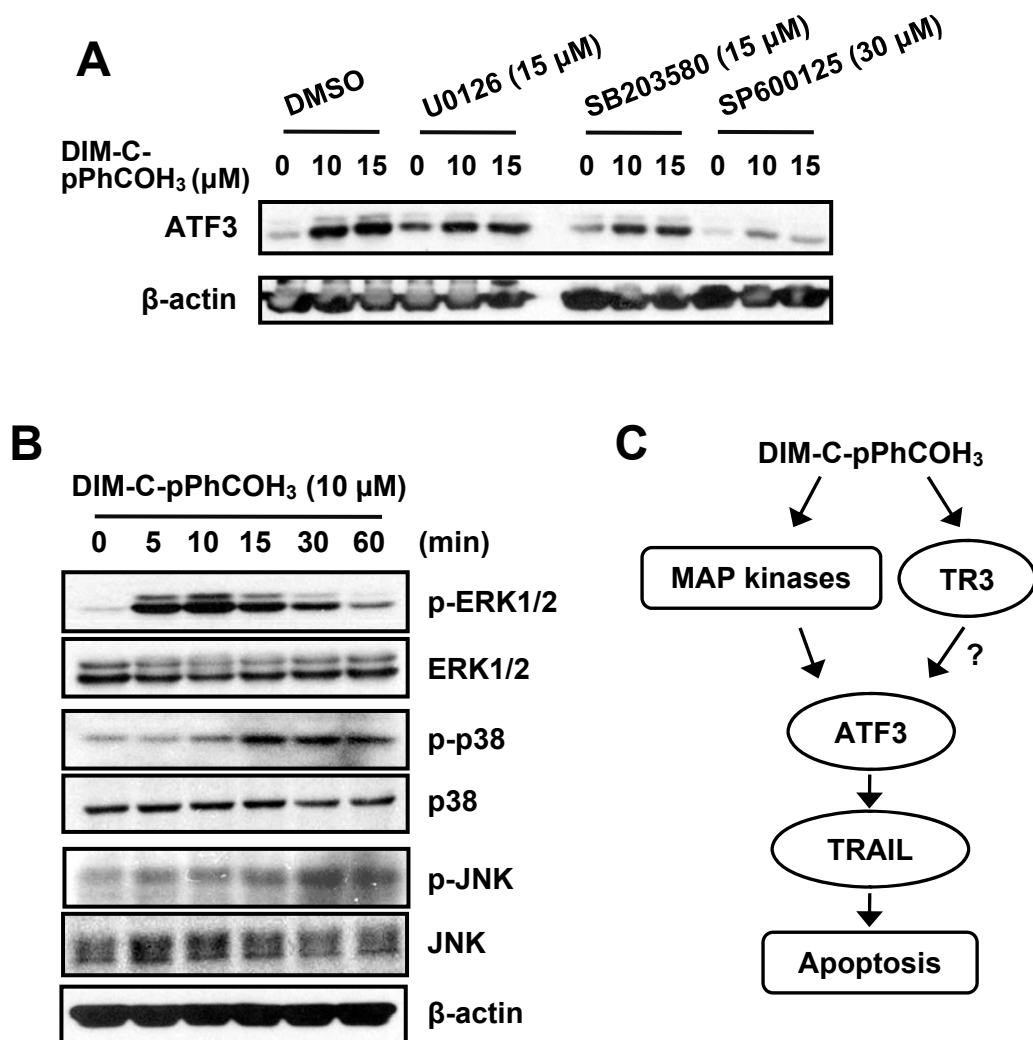
Description	Genbank	Relative expression	
		2 h/DMSO	6 h/DMSO
<b>Transcription</b>			
<i>Cysteine-serine-rich nuclear protein 1; CSRNP1</i>	NM_033027	3.72	2.32
<i>E2F transcription factor 7; E2F7</i>	BG033282	2.98	2.75
<i>FOS-like antigen 1; FOSL1</i>	NM_005438	3.22	1.87
<i>Iroquois homeobox protein 5; IRX5</i>	NM_005853	2.71	1.12
<i>MAX dimerization protein 1</i>	NM_002357	1.97	3.15
<i>Nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2; NFATC2</i>	AU185751	2.80	1.50
<i>S100 calcium binding protein A1; S100A1</i>	NM_006271	3.38	3.19
<i>SERTA domain containing 1; SERTAD1</i>	NM_013376	4.13	1.37
<i>X-box binding protein 1; XBP1</i>	NM_005080	1.58	2.78
<b>Stress</b>			
<i>ERBB receptor feedback inhibitor 1; ERRF1</i>	NM_018948	2.64	3.09
<i>Protein phosphatase 1, regulatory (inhibitor) subunit 15A; PPP1R15A</i>	NM_014330	2.88	2.34
<i>V-maf musculoaponeurotic fibrosarcoma oncogene homolog 1 (avian); MAFF</i>	NM_012323	3.28	1.2
<b>Transport</b>			
<i>Basic helix-loop-helix family, member a15; BHLHA15</i>	AA367338	0.94	5.09
<i>Casein alpha s1; CSN1S1</i>	NM_001890	2.80	2.93
<i>Neuronal pentraxin 1; NPTX1</i>	NM_002522	6.10	6.10
<i>Solute carrier family 30 (zinc transporter), member 1; SLC30A1</i>	NM_021194	1.85	2.65
<i>Sorting nexin 9; SNX9</i>	NM_016224	2.16	3.14
<i>Syntaxin 11; STX11</i>	NM_003764	4.96	2.61
<b>Immune response</b>			
<i>Chemokine (C-X-C motif) ligand 2; CXCL2</i>	NM_002089	3.07	2.45
<i>Colony stimulating factor 2 (granulocyte-macrophage); CSF2</i>	NM_000758	1.67	2.56
<i>Interleukin 1, alpha; IL1A</i>	NM_000575	1.75	3.57
<i>Secreted and transmembrane 1; SECTM1</i>	NM_003004	3.69	3.04
<i>V-ets erythroblastosis virus E26 oncogene homolog 1 (avian); ETS 1</i>	NM_005238	3.09	1.55
<b>Others</b>			
<i>Angiomotin like 2; AMOTL2</i>	NM_016201	3.72	1.48
<i>Claudin 4; CLDN4</i>	NM_001305	2.83	1.46
<i>Endothelial cell-specific molecule 1; ESM1</i>	NM_007036	3.12	3.66
<i>Cytochrome P450, family 1, subfamily B, polypeptide 1; CYP1B1</i>	NM_000104	4.36	3.03
<i>DnaJ (Hsp40) homolog, subfamily B, member 1; DNAJB1</i>	NM_006145	2.73	1.27
<i>DnaJ (Hsp40) homolog, subfamily B, member 9; DNAJB9</i>	NM_012328	1.81	5.48
<i>Interferon stimulated gene 20kDa; ISG20</i>	NM_002201	1.25	2.65
<i>Interleukin 13 receptor, alpha 2; IL13RA2</i>	NM_000640	1.15	4.80
<i>Matrix metalloproteinase 3 (stromelysin 1, progelatinase); MMP3</i>	NM_002422	1.46	4.58
<i>N-myc downstream regulated gene 1; NDRG1</i>	NM_006096	3.11	3.67

## Supplementary Figure 1



**Supplemental Figure 1.** TR3-dependent induction of ATF3 by DIM-C-pPhOCH<sub>3</sub> in L3.6pL cells. (A) and (B) L3.6pL cells were transfected with either siScr or siTR3, and treated with different concentrations of DIM-C-pPhCH<sub>3</sub> for 6 hr. Whole cell lysates were analyzed by western blot analysis, and  $\beta$ -actin was used as a loading control.

## Supplementary Figure 2



**Supplemental Figure 2.** TR3-independent induction of ATF3 by DIM-C-pPhOCH<sub>3</sub> through MAP kinase pathways. (A) Panc1 cells were pretreated with each MAP kinase inhibitor for 1 hr, and cells were then treated with DIM-C-pPhOCH<sub>3</sub> for 6 hr. (B) Panc1 cells were treated with DIM-C-pPhCH<sub>3</sub>, and the cells were harvested at the indicated time points. Whole cell lysates were analyzed by western blot analysis, and β-actin was used as a loading control. (C) Schematic diagram summarizing DIM-C-pPhOCH<sub>3</sub>-induced apoptosis through TR3-dependent and -independent induction of ATF3 in human pancreatic cancer cells.