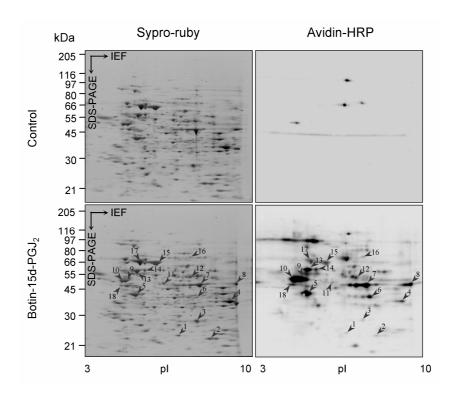
## **Supporting information**

Table S1. Summary of 15d-PGJ2-modified Proteins.

No.	Accession No.	Protein name	M.W.	pI	Total ion	Seq. coverage	Peptides
					score	(%)	
1	gi 5031635	cofilin 1 (non-muscle)	18491	8.22	125	18	2
2	gi 2981750	Chain F, Secypa Complexed With Hagpia	17790	7.82	110	19	3
3	gi 4505753	phosphoglycerate mutase 1 (brain)	28786	6.67	157	15	3
4	gi 7669492	glyceraldehyde-3-phosphate dehydrogenase	36030	8.26	251	14	4
5	gi 15277503	ACTB protein	40194	5.22	74	4	1
6	gi 6754994	poly(rC) binding protein 1	37474	6.66	123	9	2
7	gi 4503571	enolase 1	47139	7.04	238	11	4
8	gi 62896661	eukaryotic translation elongation factor 1 $\alpha$ 1 variant	50110	8.98	137	8	3
9	gi 179279	ATP synthase beta subunit	56861	5.39	312	14	4
10	gi 57209813	tubulin, beta polypeptide	47736	4.70	217	11	4
11	gi 48145673	HNRPH1	49099	5.79	93	3	2
12	-	ND	-	-	-	-	-
13	gi 306890	chaperonin (HSP60)	60986	5.70	400	13	5
14	gi 24307939	chaperonin containing TCP1, subunit 5 (epsilon)	59633	5.45	133	4	3
15	gi 763431	similar to human albumin	52048	5.69	54	1	1
17	gi 5729877	heat shock 70kDa protein 8 isoform 1	70854	5.37	333	10	4
18	gi 5803011	enolase 2	47239	4.91	55	5	2
19	gi 5803181	stress-induced-phosphoprotein 1	62599	6.40	53	2	2

SH-SY5Y cells were rinsed with phosphate-buffered saline and scraped and homogenized in a lysis buffer (10 mM Tris-HCl, pH 7.4, 5 mM EDTA, 250 mM NaCl, 1% NP-40, and protease inhibitors). The homogenate was then centrifuged at  $14,000 \times g$  for  $10 \times 4^{\circ}$ C. The supernatant (1 mg/ml) was treated with  $100 \times 10^{\circ}$  Lybert was performed, the samples were dialysed with a 2D Clean-Up Kit (GE Healthcare Bio-Sciences).

## FIGURE S1



**Fig. S1. Targets of 15d-PGJ2.** SH-SY5Y cells were rinsed with phosphate-buffered saline and scraped and homogenized in a lysis buffer (10 mM Tris-HCl, pH 7.4, 5 mM EDTA, 250 mM NaCl, 1% NP-40, and protease inhibitors). The homogenate was then centrifuged at 14,000 x *g* for 10 min at 4°C. The supernatant (1 mg/ml) was treated with 100 uM biotinylated 15d-PGJ2 at 37°C for 1 hour. Before electrophoresis was performed, the samples were dialysed with a 2D Clean-Up Kit (GE Healthcare Bio-Sciences).