Figure S1. CS did not suppress the expression nor activity of LDHA in endometriotic cells. (A and B) LDHA activity was analyzed using purified recombinant LDHA in presence of the indicated concentration of CS (for A) and a 12Z cell lysate as the source of the enzyme (for B). Results of three independent experiments are presented as mean ± SD. *P<0.05, ***P<0.001 compared to the negative control (1st lane); $^{\#\#\#}$P<0.001 compared to the positive control (2nd lane). (C) 12Z cells were treated with CS at the indicated concentrations for 12 h. The expressions of LDHA were examined by western blot analysis. GAPDH expression was used for internal control. LDHA, lactate dehydrogrnase A; CS, extract of *Caesalpinia sappan* L. heartwood; OXA, Oxamate.

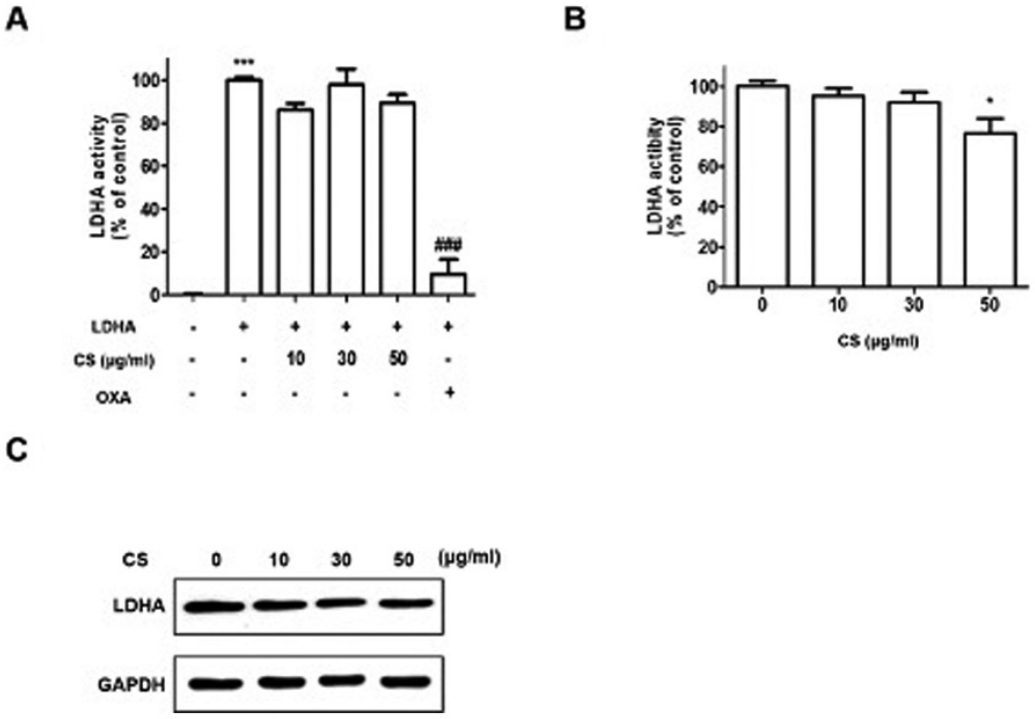

Figure S2. DCA reduces cell growth, lactate production, and phosphorylated PDHA in 12Z cells. (A) 12Z cells were treated with 40 mM DCA for 12 h. The production of lactate was measured by a commercially available lactate assay kit in 12Z cell culture media. Results of three independent experiments are presented as mean ± SD. ***P<0.001 compared to the control. (B) Cells were treated with 40 mM DCA for 12 h. Phosphorylation of PDHA was examined by Western blot analysis. The total form of PDHA expression was used for internal control. (C) 12Z cells were treated with DCA at the indicated concentrations for 12 h. cell viability was measured by MTT assay. Results of three independent experiments are presented as mean ± SD. **P<0.01, ***P<0.001 compared to the control (1st lane). DCA, dichloroacetate; PDHA, pyruvate dehydrogenase E1α.

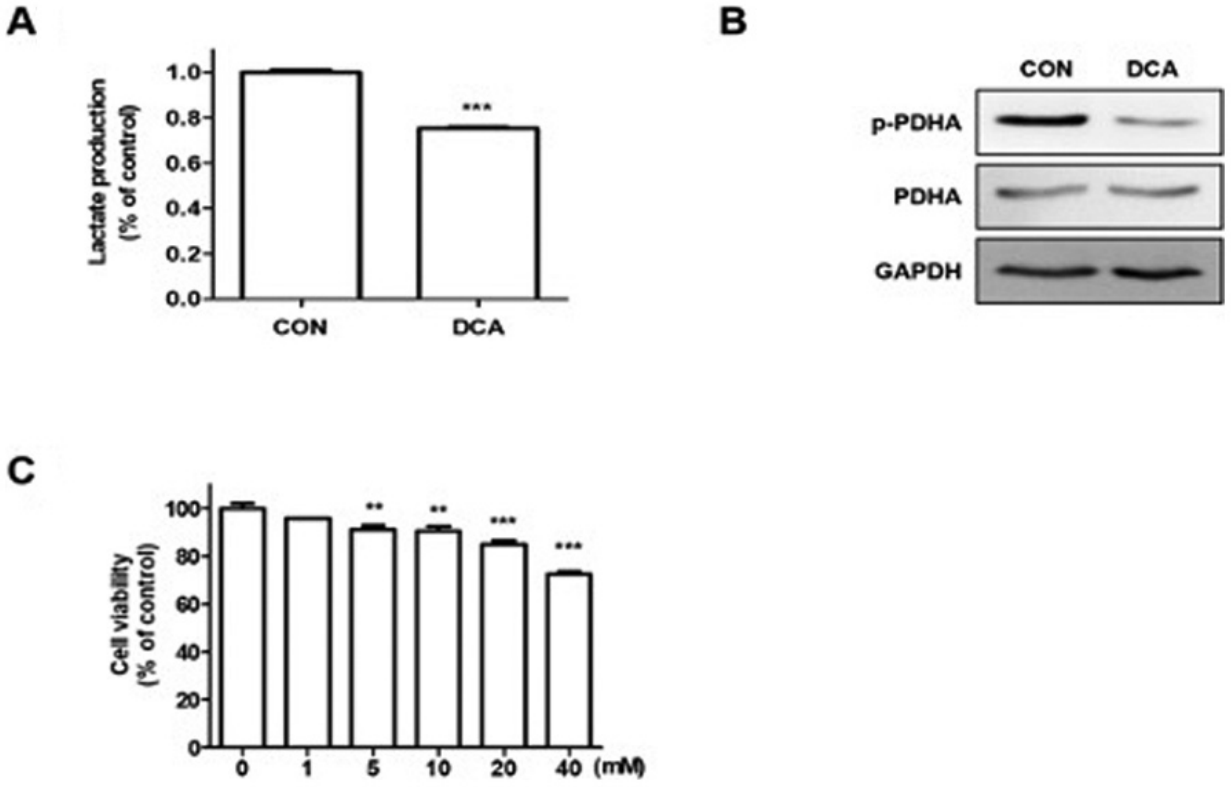

Figure S3. CS did not suppress the activity of PDK1. The recombinant human PDK enzyme and/or PDHA substrate were mixed in a tube and treated with CS at the indicated concentration to confirm the *in vitro* kinase activity of PDK1. GST, glutathione S-transferase; PDK, pyruvate dehydrogenase kinase; PDHA, pyruvate dehydrogenase E1α; CS, extract of *Caesalpinia sappan* L. heartwood.

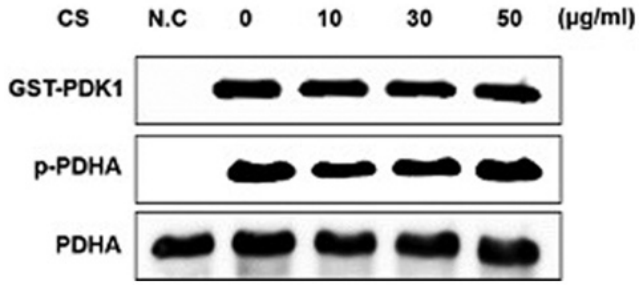

Figure S4. Brazilin did not reduce the phosphorylation of PDHA in 12Z cells. 12Z cells were treated with brazilin at the indicated concentrations for 12 h. The phosphorylation of PDHA was examined by western blot analysis. PDHA, pyruvate dehydrogenase E1α.

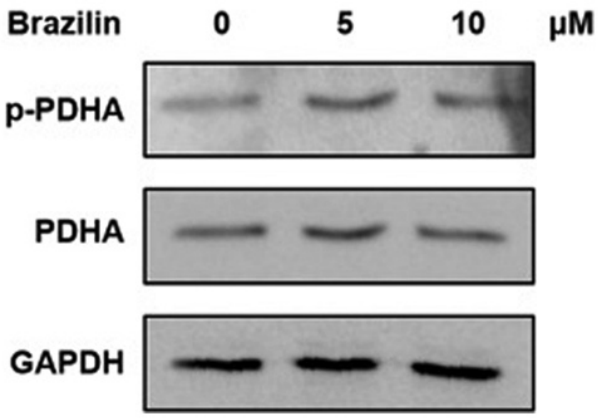

Figure S5. CS produces ROS in endometriotic 12Z cells. 12Z cells were treated with CS at the indicated concentrations and/or NAC (5 mM) for 12 h. (A) Intracellular ROS levels of the cells were measured by FACS analysis using carboxy-H2DCFDA ROS detection kit. (B) The relative ROS levels were shown as mean ± standard deviation of three independent experiments; ***P<0.001. CS, extract of *Caesalpinia sappan* L. heartwood; ROS, reactive oxygen species; NAC, N-Acetylcysteine; DCFDA, dichlorodihydrofluorescein diacetate; FACS, fluorescence-activated cell sorting.

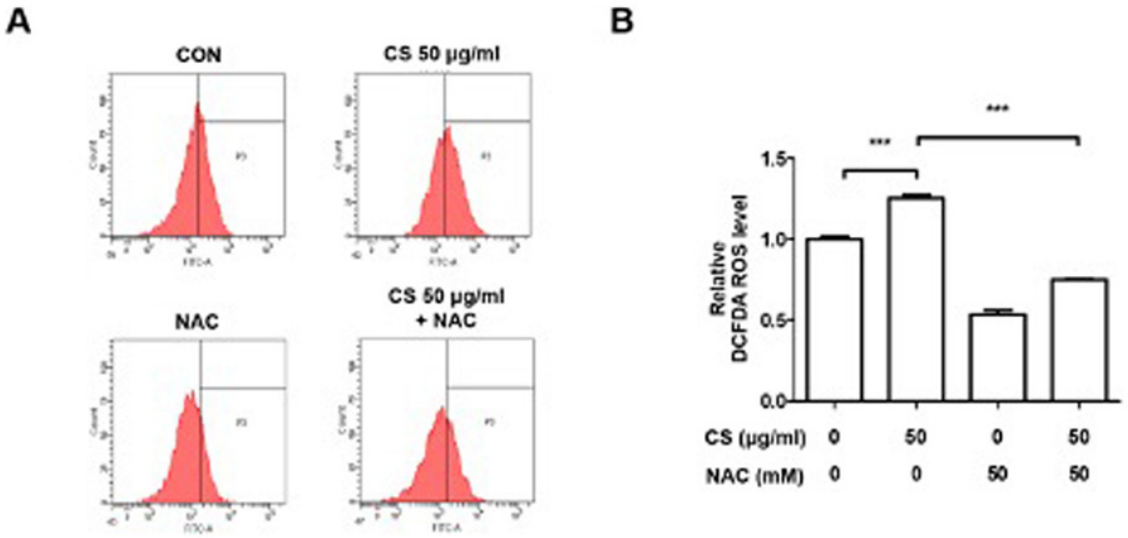

Table SI. Primers used in the present study.

Gene	Direction	Sequence (5'→3')
PDK1 cloning	Sense	AAGAATTCCATGAGGCTGGCGCGGCTGC
	Antisense	ACCTCGAGCTAGGCACTGCGGAACGTCG
PDK1	Sense	CTATGAAAATGCTAGGCGTCT
	Antisense	AACCACTTGTATTGGCTGTCC
PDK2	Sense	AGGACACCTACGGCGATGA
	Antisense	TGCCGATGTGTTTGGGATGG
PDK3	Sense	GCCAAAGCGCCAGACAAAC
	Antisense	CAACTGTCGCTCTCATTGAGT
PDK4	Sense	CCTGTGAGACTCGCCAACA
	Antisense	TCCACCAAATCCATCAGGCTC
18S rRNA	Sense	GTAACCCGTTGAACCCCATT
	Antisense	CCATCCAATCGGTAGTAGCG

PDK, pyruvate dehydrogenase kinase; rRNA, ribosomal RNA.