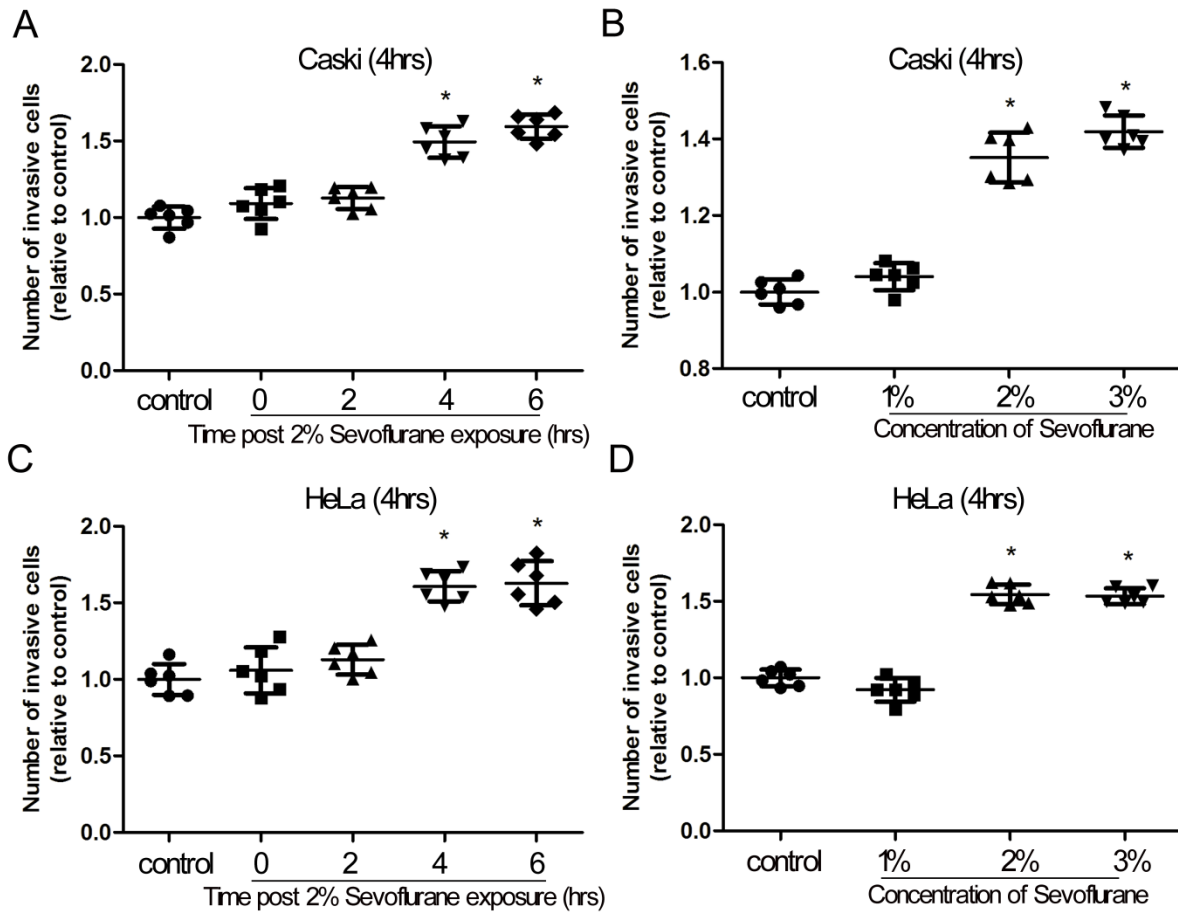
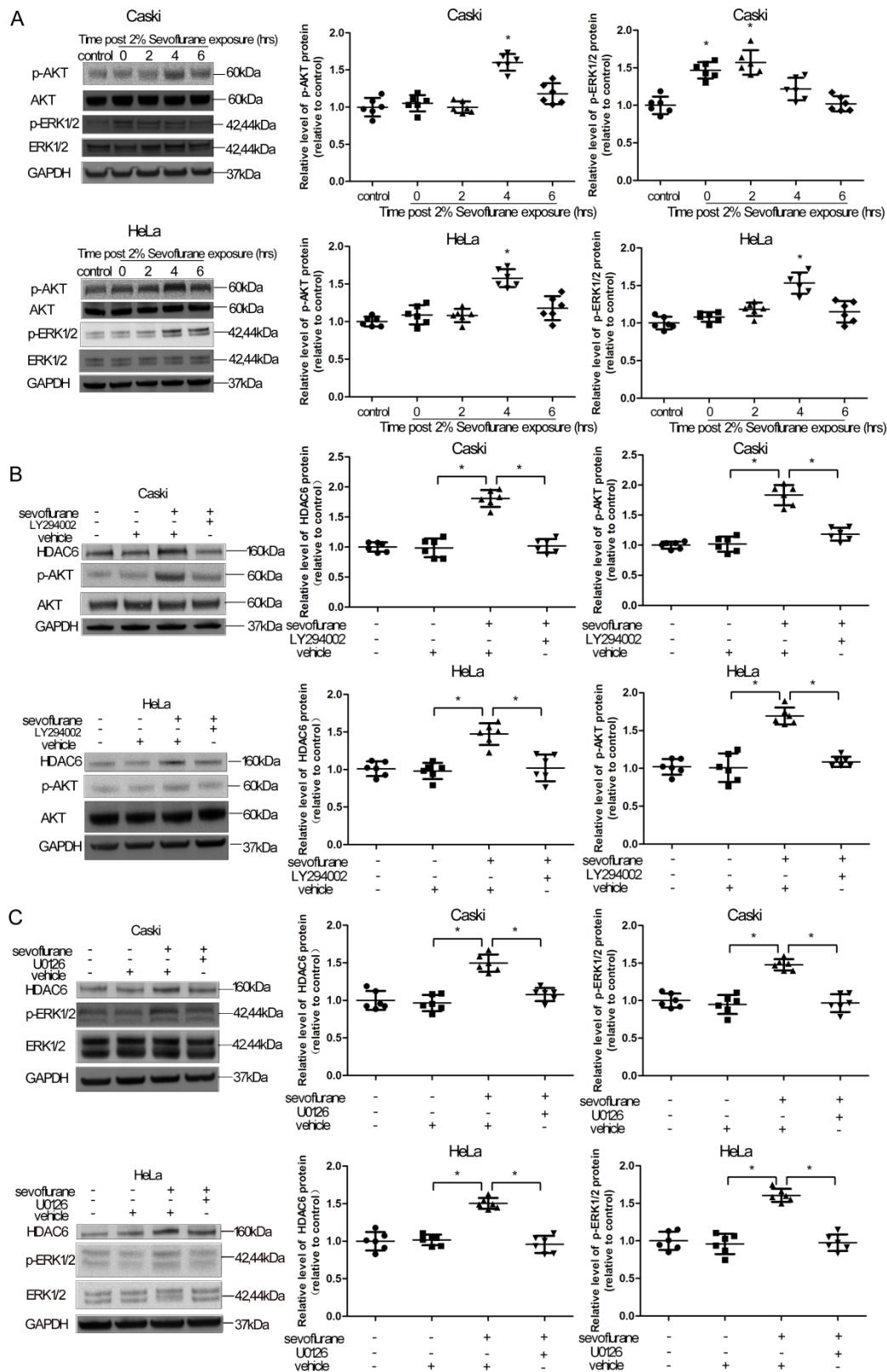


**Supplementary Figure 1.** Cervical cancer migration after sevoflurane treatment. Caski cells were treated with or without different concentration (1%, 2% and 3%) of sevoflurane in 5% carbon dioxide balanced with air for 2 or 4 hrs, and Transwell assay (A-B) was performed at different time points (0, 2, 4 and 6 hrs) post-gas exposure. HeLa cells were also exposed to sevoflurane for 2 or 4 hrs, Transwell assay (C-D) was performed at 0, 2, 4 and 6 hrs post-gas exposure, respectively. Data were presented as mean  $\pm$  standard deviation (n = 6). One-way analysis of variance with Dunnett corrections; \* $P < 0.001$  vs control.



**Supplementary Figure 2.** Cervical cancer cell invasion after sevoflurane treatment. Caski cells were treated with or without different concentration (1%, 2% and 3%) of sevoflurane in 5% carbon dioxide balanced with air for 4 hrs, Transwell assay was performed at different time points (0, 2, 4 and 6 hrs) postgas exposure (A-B). HeLa cells were also exposed to different concentration of sevoflurane for 4 hrs, Transwell assay (C-D) was performed at 0, 2, 4 and 6 hrs postgas exposure, respectively. Data were presented as mean  $\pm$  standard deviation ( $n = 6$ ). One-way analysis of variance with Dunnett corrections; \* $P < 0.001$  vs control.



**Supplementary Figure 3.** Sevoflurane increases histone deacetylase 6 (HDAC6) by activating phosphatidylinositol 3-kinase (PI3K) / Protein kinase B (AKT) and extracellular regulated protein kinases (ERK1/2) pathway. Cells were treated with or without 2% sevoflurane for 2 hrs and upstream

HDAC6 effector phosphorylated AKT (p-AKT) and phosphorylated ERK1/2 (p-ERK1/2) was analysed by Western blot at different time point (0, 2, 4 and 6 hrs) postgas exposure (A). HeLa and Caski cells were pretreated with an AKT inhibitor (LY294002) prior to treatment with 2% sevoflurane for 2hrs, followed by Western blot to detect changes of HDAC6 and p-AKT expression (B). Cells were pretreated with an ERK1/2 inhibitor (U0126) prior to treatment with 2% sevoflurane for 2hrs, followed by Western blot to detect changes of HDAC6 and p-ERK1/2 expression (C). Data were shown as mean  $\pm$  standard deviation (n = 6). One-way analysis of variance with Dunnett test (A); One-way analysis of variance with Newman-keuls test (B and C); \*:  $P < 0.001$  vs control or as present.