Figure S1. The expression of $S C G B 2 A 1$ mRNA in cancer cell lines from the Broad Institute Cancer Cell Line Encyclopedia database. The x axis represents different cancer cell lines, and the y axis represents $S C G B 2 A 1$ mRNA expression values. $S C G B 2 A 1$, secretoglobin family 2 A member 1.
mRNA expression (RNAseq): SCGB2A1


Figure S2. SCGB2A1 expression in two patients with endometrial cancer detected by immunohistochemistry from the The Human Protein Atlas database. The expression of $S C G B 2 A 1$ in endometrial cancer was strong positive in brown color. $S C G B 2 A 1$, secretoglobin family 2A member 1.


Figure S3. DNA methylation analysis of SCGB2A1 in UCEC using the Mexpress tool. The solid lines represent six SCGB2Al methylation sites and r-value represents the correlation between $S C G B 2 A 1$ DNA methylation and $S C G B 2 A 1$ gene expression regulation. Probe $1=\operatorname{cg} 01919620, \mathrm{r}=-0.017, \mathrm{P}>0.05$; probe $2=\operatorname{cg} 05277881, \mathrm{r}=-0.339, \mathrm{P}<0.001$; probe $3=\operatorname{cg} 16986846$, $\mathrm{r}=-0.210$, $\mathrm{P}<0.001$; probe $4=\operatorname{cg} 06334737, \mathrm{r}=-0.295, \mathrm{P}<0.001$; probe $5=\operatorname{cg} 23206745, \mathrm{r}=-0.378, \mathrm{P}<0.001$ and probe $6=\operatorname{cg} 14265033, \mathrm{r}=-0.198$, $\mathrm{P}<0.001$. SCGB2A1, secretoglobin family 2A member 1.


Table SI. Clinical characteristics of 47 patients with endometrial cancer from the Fudan University Shanghai Cancer Center.

| Clinical characteristics | Number (\%) |
| :---: | :---: |
| Age at diagnosis ${ }^{\text {a }}$, years | 52 (42-69) |
| Race |  |
| White | 0 (0) |
| Black or African American | 0 (0) |
| Other | 47 (100) |
| Menopause status |  |
| Pre | 12 (25.53) |
| Post | 35 (74.47) |
| Surgical approach |  |
| Minimally invasive |  |
| Open | 47 (100) |
| Histological type |  |
| Serous endometrial adenocarcinoma | 8 (17.02) |
| Endometrioid endometrial adenocarcinoma | 39 (82.98) |
| Mixed serous and endometrioid | 0 (0) |
| Grade |  |
| Low G1 | 38 (80.85) |
| Moderate G2 | 9 (19.15) |
| High G3 | 0 (0) |
| Tumor invasion depth, \% |  |
| <50\% | 43 (91.49\%) |
| $\geq 50 \%$ | 4 (8.51\%) |
| Tumor status |  |
| Tumor free | 2 (4.26) |
| With tumor | 45 (95.74) |
| Residual tumor |  |
| No residual R0 | 47 (100) |
| With residual R1/R2 | 0 (0) |
| Peritoneal washing |  |
| Negative | 47 (100) |
| Positive | 0 (0) |
| Pelvic lymph node metastasis |  |
| Negative | 43 (91.49) |
| Positive | 4 (8.51) |
| Para-aortic lymph node |  |
| Negative | 47 (100) |
| Positive | 0 (0) |
| Stage |  |
| I | 39 (82.98) |
| II | 4 (8.51) |
| III | 4 (8.51) |
| IV | 0 (0) |

${ }^{\text {a }}$ Presented as median (range).

