Figure S1. Immunohistochemical staining of PTCH1 protein obtained using four different antibodies, anti-PTCH1a, anti-PTCH1b, anti-PTCH1c and anti-PTCH1d. (A-D) HGSC and (E-H) LGSC (scale bar, 50 µm; magnified windows, x400 magnification). HGSC, high-grade serous ovarian carcinoma; LGSC, low-grade serous ovarian carcinoma; PTCH1, protein patched homolog 1.



Figure S2. Immunofluorescence staining of PTCH1 protein in high-grade serous ovarian carcinoma cell lines, OVCAR8 and OVSAHO, and normal fallopian tube non-ciliated epithelial cell line FNE1. (A, first row) Staining with an anti-PTCH1b antibody. (A, second row) Nuclei stained with Hoechst. (A, third row) Merged images (scale bars, 10  $\mu$ m). (B) Mean fluorescence intensity of PTCH1 protein in OVCAR8, OVSAHO and FNE1 cell lines. \*\*P<0.0001. PTCH1, protein patched homolog 1.



Figure S3. Immunofluorescence staining of PTCH1 protein in high-grade serous ovarian carcinoma cell lines, OVCAR8 and OVSAHO, and normal fallopian tube non-ciliated epithelial cell line FNE1. (A, first row) Staining with an anti-PTCH1c antibody. (A, second row) Nuclei stained with Hoechst. (A, third row) Merged images (scale bars, 10  $\mu$ m). (B) Mean fluorescence intensity of PTCH1 protein in OVCAR8, OVSAHO and FNE1 cell lines. \*\*P<0.0001. PTCH1, protein patched homolog 1.



Figure S4. Subcellular localization of PTCH1 protein in high-grade serous ovarian carcinoma cell lines, OVCAR8 and OVSAHO, and normal fallopian tube non-ciliated epithelial cell line FNE1. Western blotting using (A) anti-PTCH1b (B) and anti-PTCH1c antibodies. PTCH1, protein patched homolog 1; input, total proteins; cytopl., cytoplasmic proteins; membr., membrane proteins; nucl., nuclear soluble proteins; chrom., chromatin-bound proteins; cytosk., cytoskeletal proteins; aa, amino acids.

