

Supporting Figure S1

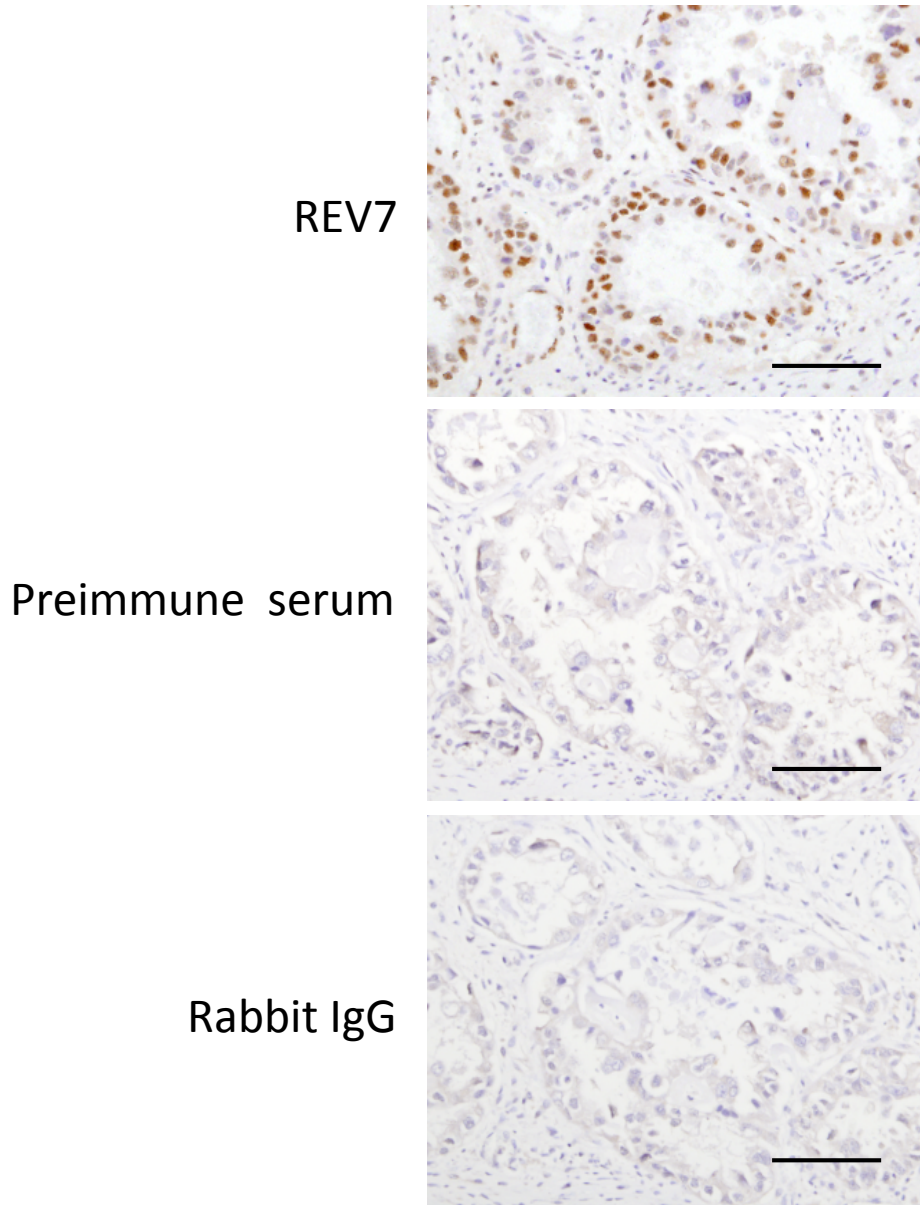


Fig. S1. The specific immunohistochemical reaction of rabbit polyclonal anti-REV7 antibody. Ovarian clear cell carcinoma tissue was immunostained with anti-REV7 antibody. Negative control staining using the preimmune serum or normal rabbit IgG was shown. Scale bar, 100 μm .

Supporting Figure S2

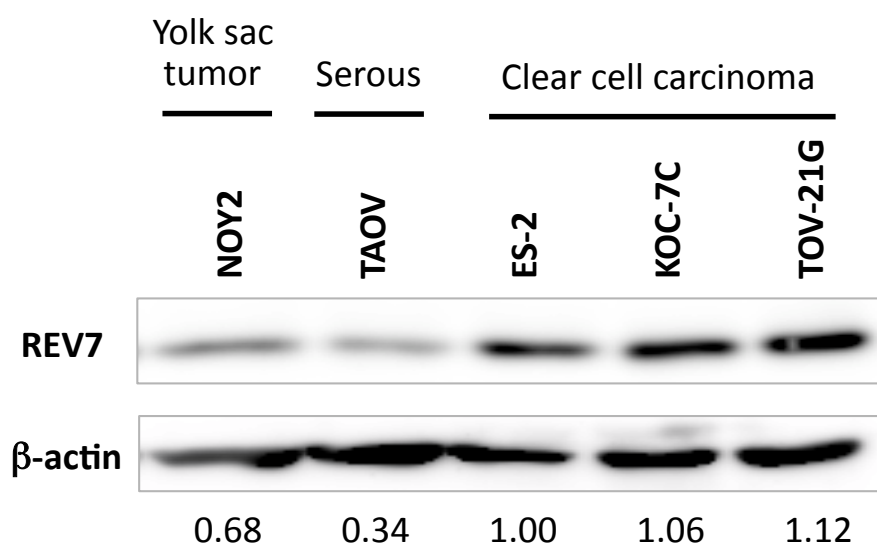


Fig. S2. REV7 expression in ovarian cancer cell lines. Western blot analysis was performed with anti-REV7 and anti- β -actin antibodies. Relative expression of REV7 was quantitatively assessed using ImageQuant TL, which is indicated at the bottom of the panel.

Supporting Figure S3

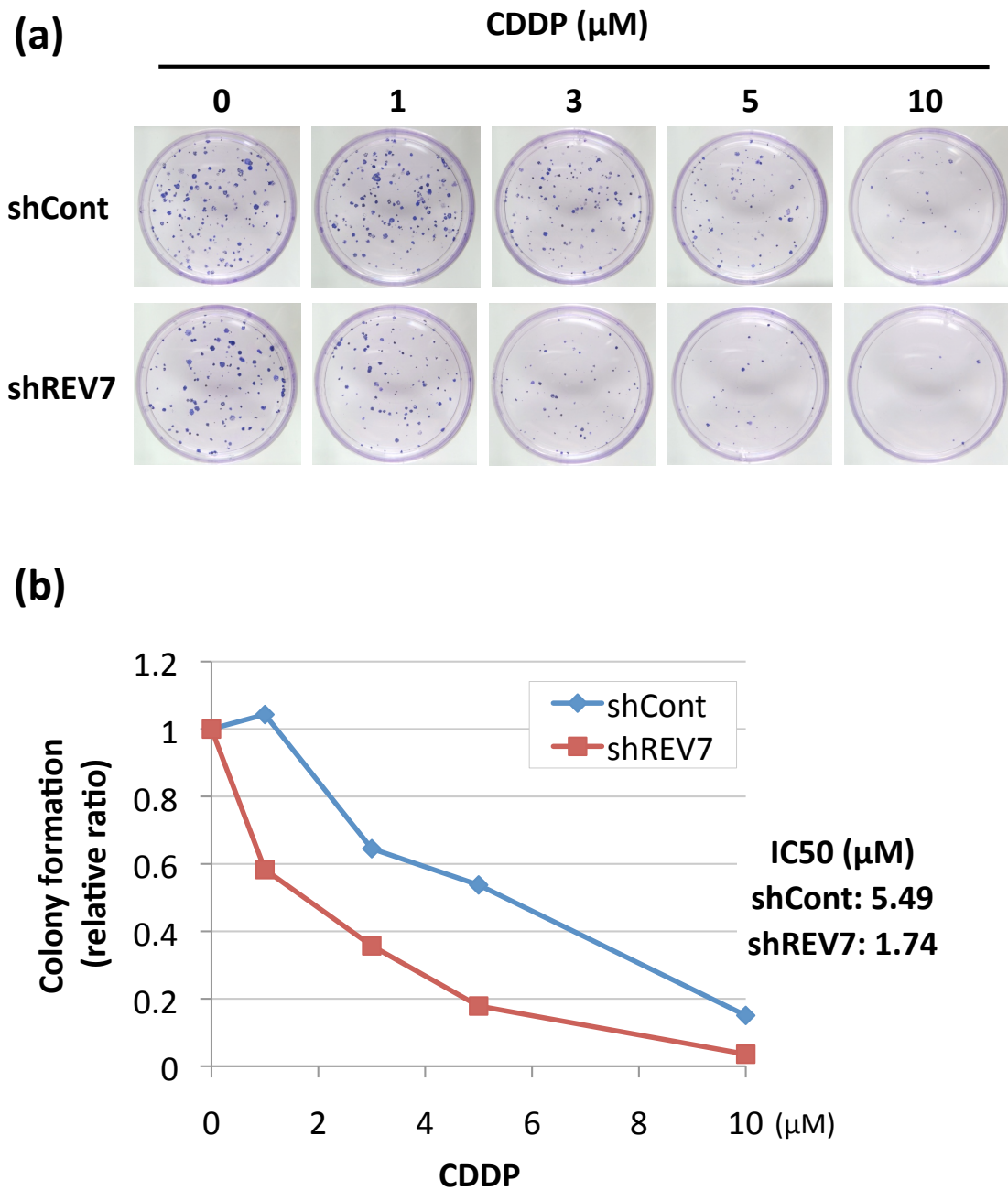


Fig. S3. REV7 depletion enhances chemosensitivity in colony formation assay. Five hundreds of shREV7 and shCont TOV-21G cells were seeded in 6 cm dishes and CDDP treatment with the indicated concentration was started 24 h after seeding. The cells were cultured in the medium with CDDP for 48 h, then cultured in the fresh medium for 14 days. Developed colonies with more than 1.5mm diameter were counted. (a) Pictures of the colonies developed on the plates after CDDP treatment. (b) Relative number of developed colony in each dish. IC₅₀ was also indicated.

Supporting Figure S4

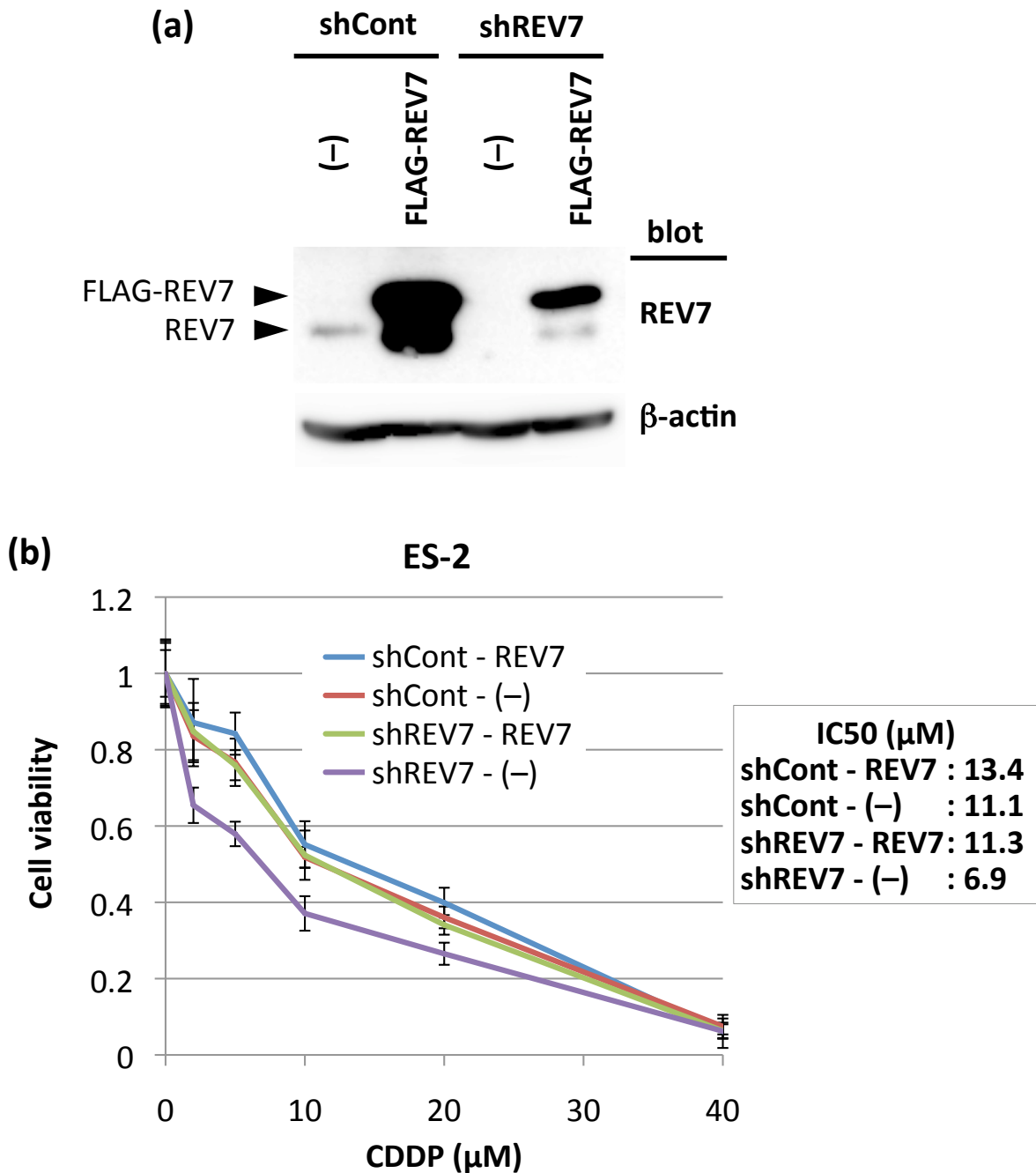


Fig. S4. REV7 expression conferred resistance to CDDP. Expression vector for FLAG-tagged REV7 (FLAG-REV7) protein was generated by inserting cDNA sequence of FLAG-REV7 into the plasmid vector pcDNA3.1(+). (a) Western blot images of REV7 expression in shCont and shREV7 ES-2 cells with and without ectopic FLAG-REV7 expression. The image of β -actin is indicated as an internal control. (b) Cell viability analysis of CDDP-treated ES-2 cells. The IC₅₀ of each cells is indicated on the right. Experiments were performed in triplicate and the means \pm SDs of relative absorbance are shown.

Supporting Figure S5

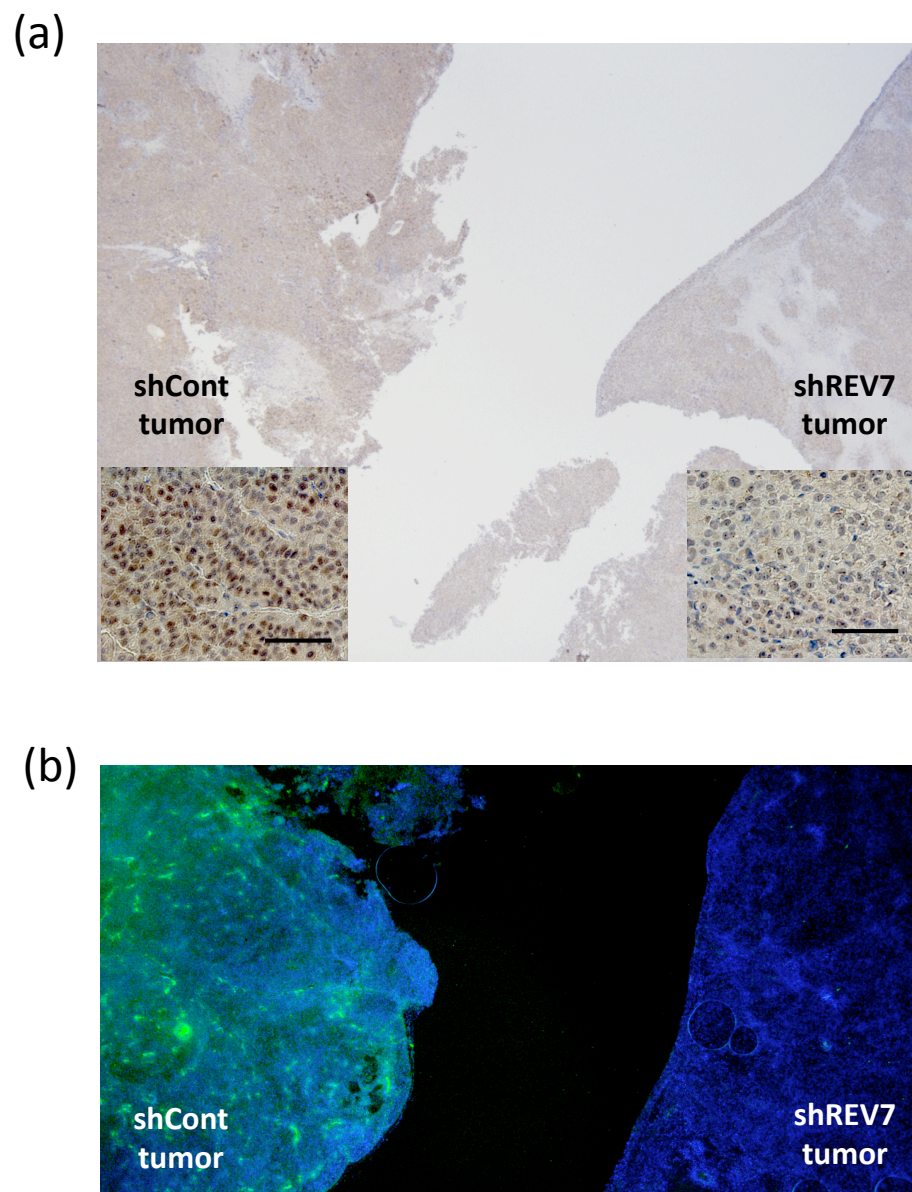


Fig. S5. Immunohistochemical and Immunofluorescence analyses of shCont and shREV7 tumors for REV7 expression. Excised tumor tissues at day 32 were immunohistochemically (a) and immunofluorescently (b) stained with rabbit polyclonal anti-REV7 antibody. Positive signals were visualized with DAB (a) or Alexa 488 (b, green). REV7 expression is clearly decreased in shREV7 tumor cells compared with shCont tumor cells. Scale bars, 50 μm .