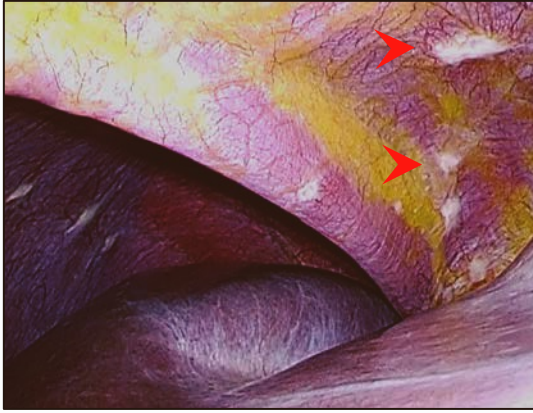
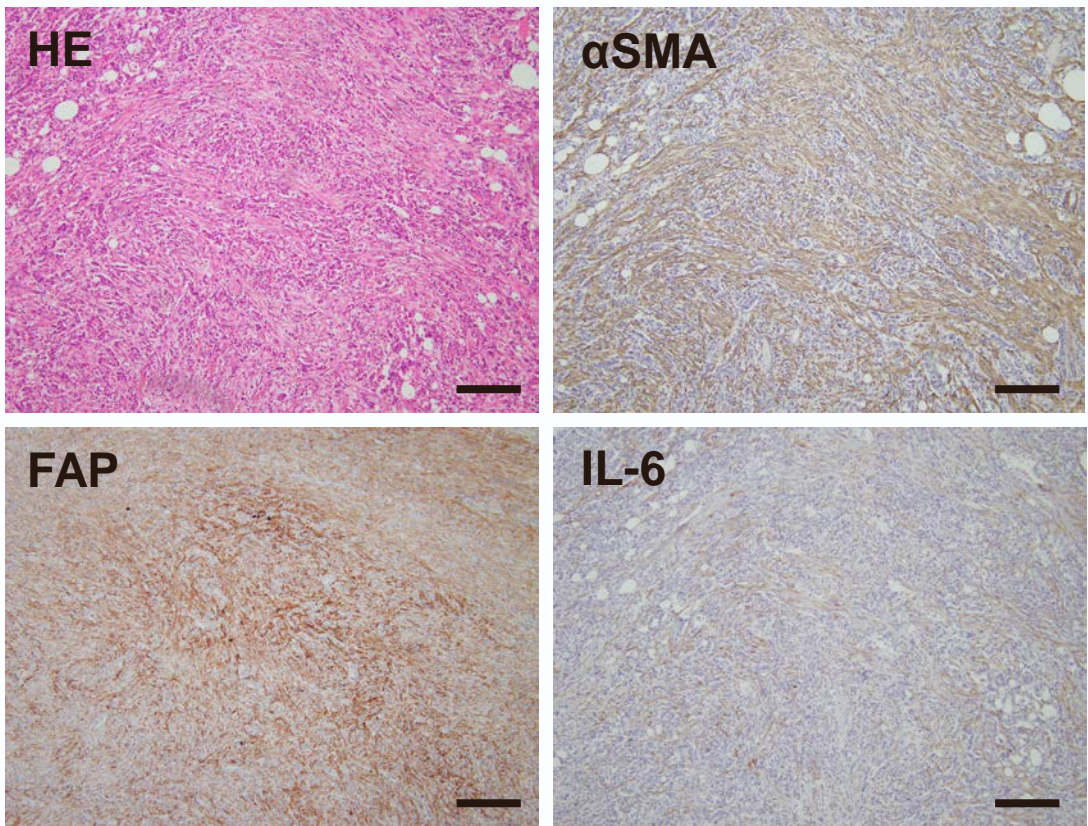


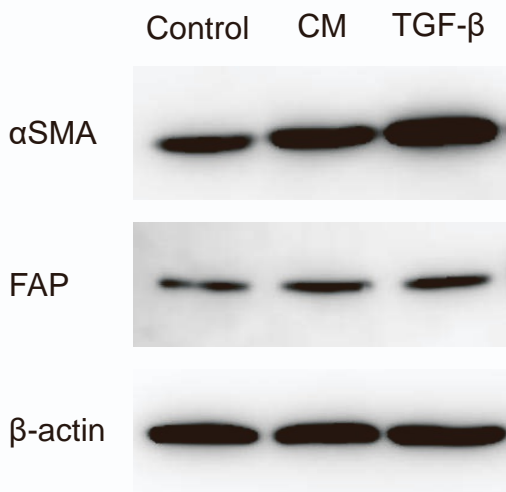
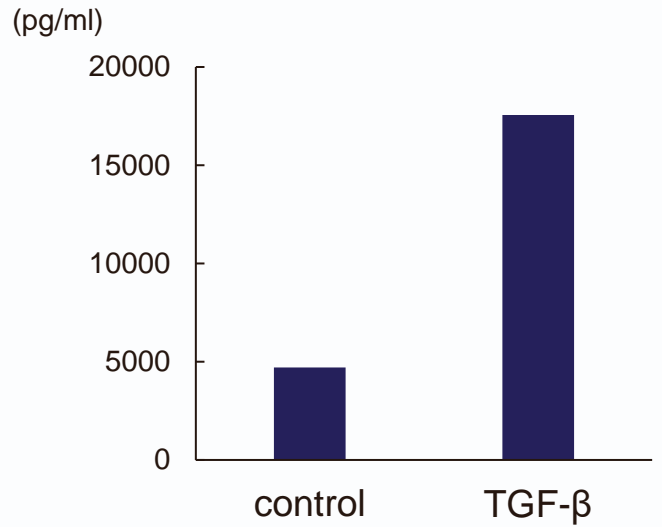
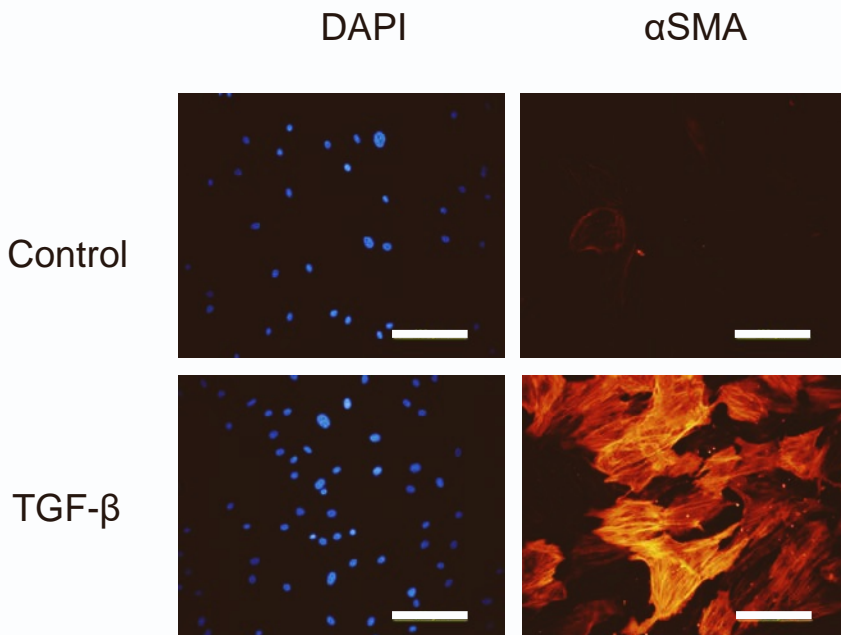
Supplemental information

**Modulation of *p53* expression in cancer-associated
fibroblasts prevents peritoneal
metastasis of gastric cancer**

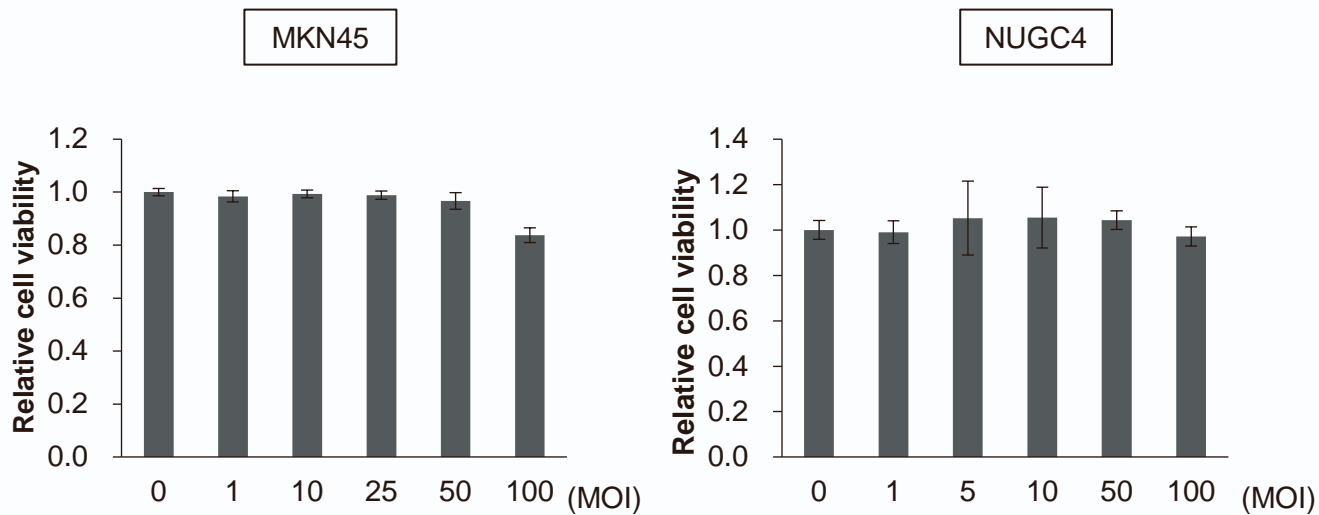
Toshihiro Ogawa, Satoru Kikuchi, Motoyasu Tabuchi, Ema Mitsui, Yuta Une, Hiroshi Tazawa, Shinji Kuroda, Kazuhiro Noma, Toshiaki Ohara, Shunsuke Kagawa, Yasuo Urata, and Toshiyoshi Fujiwara

A**B****Supplementary Fig. S1**

Immunohistochemical analysis of peritoneal metastasis of GC. **A**, Laparoscopic view of peritoneal metastasis of GC. White nodules indicates peritoneal metastasis (arrowheads). **B**, Representative microscopic images of peritoneal metastasis stained by HE and IHC staining for α SMA, FAP and IL-6. Scale bar, 200 μ m.

A**B****C****Supplementary Fig. S2**

NGF activated by CM from MKN-7 or TGF- β showed CAFs-like properties. **A**, Western blotting analysis of NGF and activated NGF by CM from MKN-7 or TGF- β . β -actin was used as a loading control. **B**, The amount of IL-6 secretion in NGF and activated NGF by TGF- β . **C**, Immunofluorescence analysis of NGF and activated NGF by TGF- β . Blue color indicates the nucleus, orange color indicates α SMA expression. Scale bar, 200 μ m.

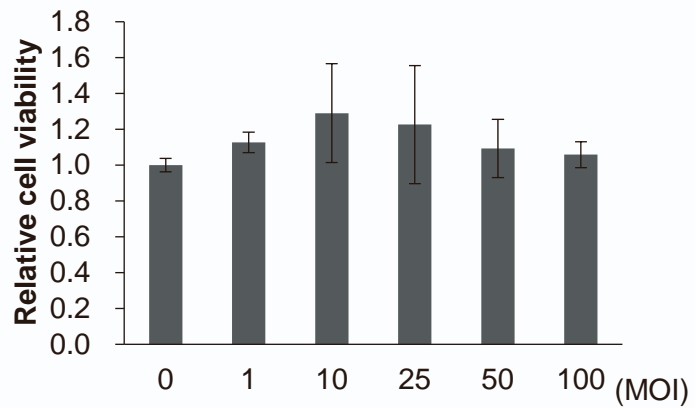
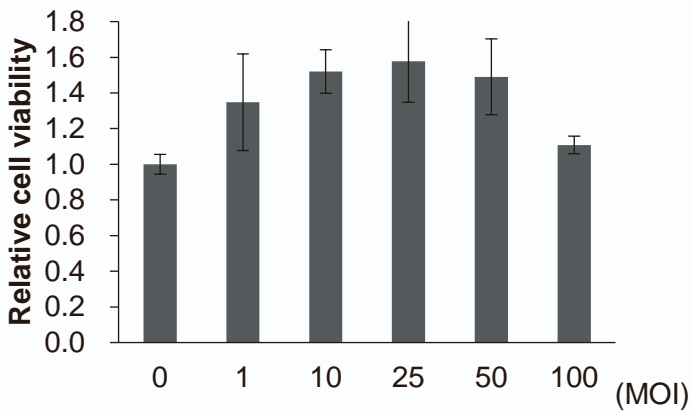


Supplementary Fig. S3

MKN45 and NUGC4 cells were resistant to OBP-301. Cells were infected with OBP-301 at the indicated MOIs for 3 days. Cell viability was quantified using the XTT assay. The cell viability of a mock-treated group was considered 1.0, and the relative cell viability was calculated. Data are expressed as the mean \pm SD (n = 5).

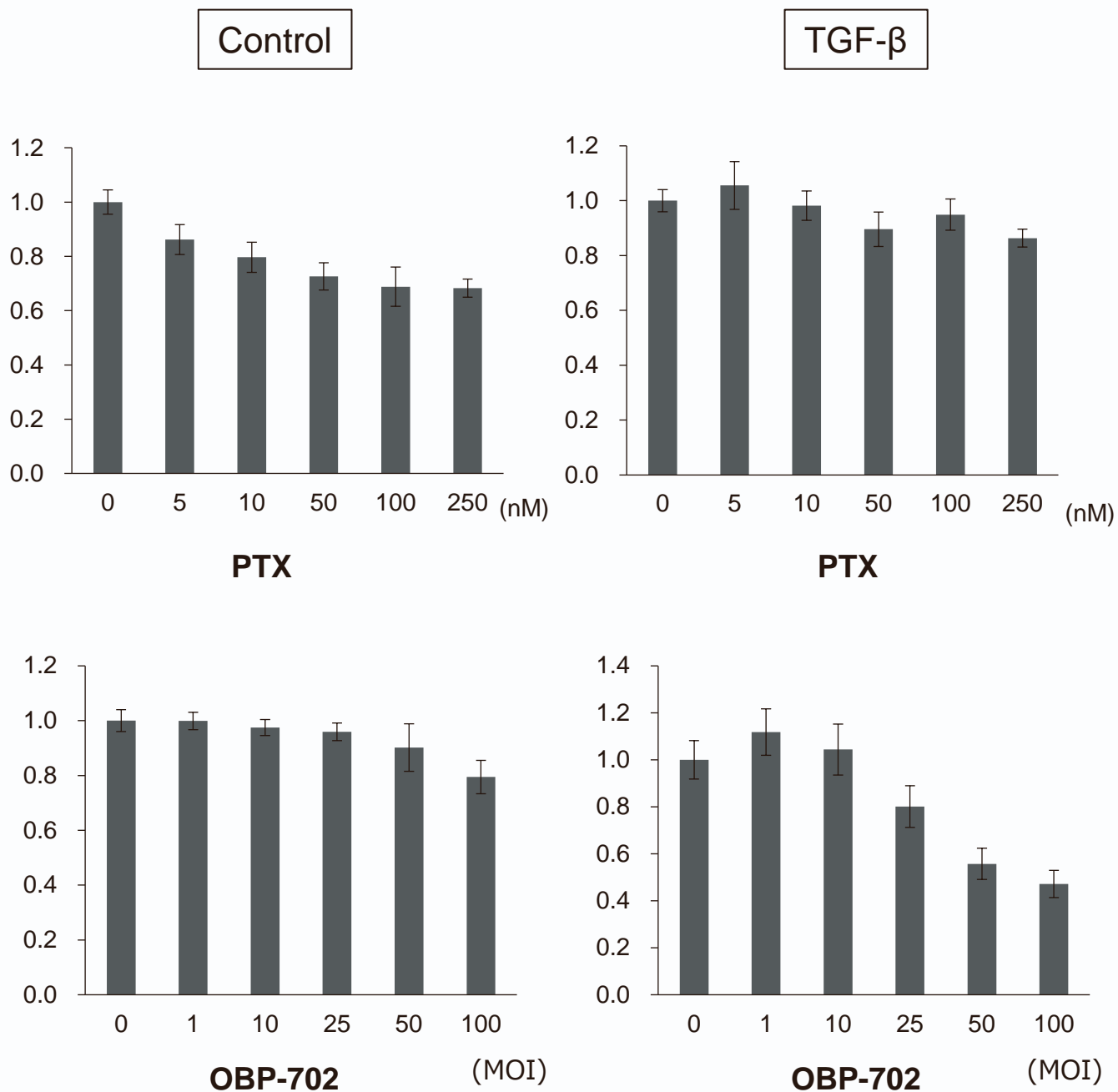
NGF1

CAF1



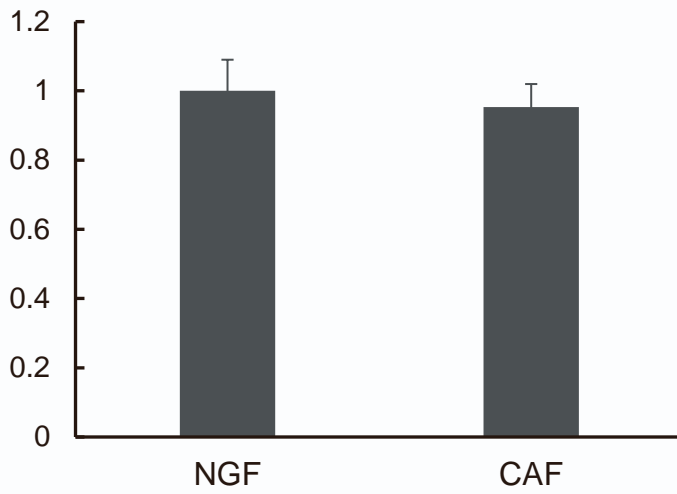
Supplementary FigS4

OBP-301 has no cytotoxicity to NGF and CAF. NGF1 and CAF1 were infected with OBP-301 at the indicated MOIs for 3 days. Cell viability was quantified using the XTT assay. The cell viability of a mock-treated group was considered 1.0, and the relative cell viability was calculated. Data are expressed as the mean \pm SD (n = 5).



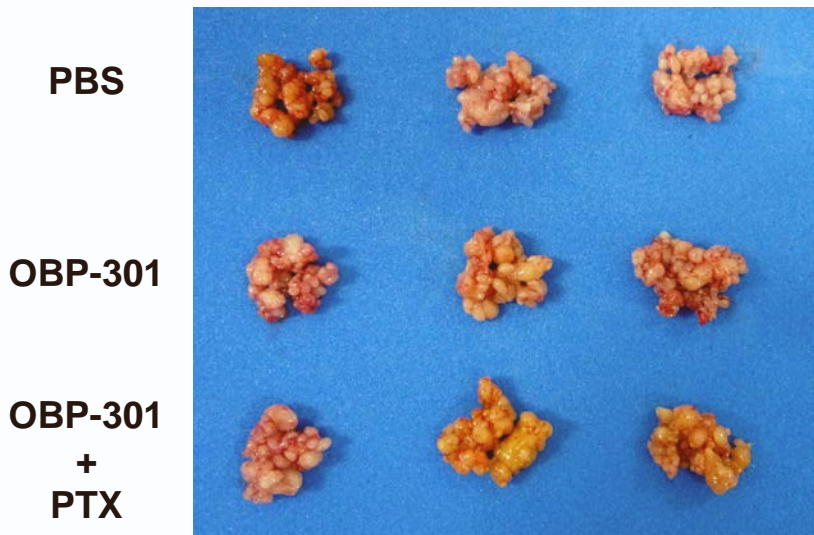
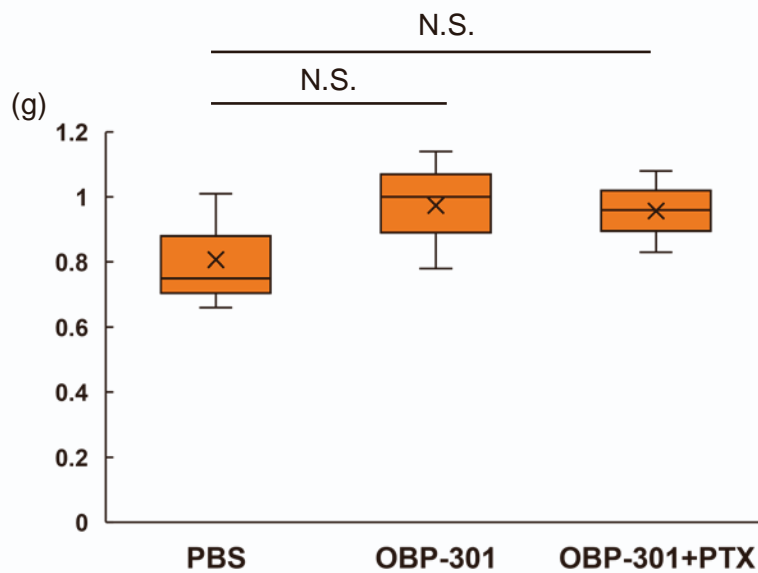
Supplementary FigS5

Activated NGF by TGF- β became to be OBP-702 sensitive and PTX resistant. NGF2 and activated NGF2 by TGF- β were infected with OBP-702 at the indicated MOIs for 3 days. Cells were treated with PTX at the indicated doses for 24 h. Cell viability was quantified using the XTT assay. The cell viability of a mock-treated group was considered 1.0, and the relative cell viability was calculated. Data are expressed as the mean \pm SD (n = 5).



Supplementary FigS6

hTERT expression between NGF and CAF. Quantitative real-time PCR assay was performed to quantify the amount of hTERT copy. The copy number of hTERT is defined as the hTERT/ GAPDH ratio relative to that of the sample NGF (NGF = 1). Data are shown as means \pm SD.

A**B****Supplementary FigS7**

Intraperitoneal administration of OBP-301 in combination with PTX did not suppress tumor growth of MKN45-Luc and CAFs. **A**, Macroscopic images of resected all tumor nodules in abdominal cavity after treatment. **B**, Total tumor volume weight in abdominal cavity after treatment. Data are expressed as mean \pm SD (n = 3). Statistical significance was defined as $p < 0.05$.