Figure S1. MTA1 overexpression in MTA1-KO MSS31 cells transfected with the MTA1 expression vector. (A) Expression of *MTA1* mRNA in wild-type MSS31 cells, MTA1-KO MSS31 cells (non-treatment), MTA1-KO cells transfected with EV and MTA1-KO cells transfected with MTA1 expression vector (MTA1-KO + OE MSS31 cells) analyzed by reverse transcription-quantitative PCR (n=3). \*P<0.05. Data are presented as the mean ± SD. (B) Expression of MTA1 protein in wild-type MSS31 cells, MTA1-KO MSS31 cells (non-treatment), MTA1-KO cells transfected with MTA1 expression vector (MTA1-KO + OE MSS31 cells analyzed by reverse transcription-quantitative PCR (n=3). \*P<0.05. Data are presented as the mean ± SD. (B) Expression of MTA1 protein in wild-type MSS31 cells, MTA1-KO MSS31 cells (non-treatment), MTA1-KO cells transfected with EV and MTA1-KO cells transfected with MTA1 expression vector (MTA1-KO + OE MSS31 cells) analyzed by western blotting (n=3). MTA1-KO cells transfected protein 1; KO, knockout; OE, overexpression; EV, empty vector; non, non-treatment.



Figure S2. MTA1-KO MSS31 cells transfected with MTA1 expression vector (MTA1-KO + OE MSS31 cells) did not observe tube formation at 5 h. Tube formation assays were performed using MTA1-KO MSS31 cells and MTA1-KO + OE MSS31 clones, and images were captured after 5 h after the cells were seeded. Scale bar,  $200 \mu m$ .



Figure S3. The expression and phosphorylation of VEGFR2 in MSS31 cells and MTA1-KO clones by VEGF and the expression of MTA1 in MSS31 cells by VEGF treatment. (A) p-VEGFR2 and VEGFR2 expression levels in wild-type MSS31 cells and MTA1-KO clones treated with VEGF (10 ng/ml) for 30 min were assessed by western blotting (n=3). (B) Western blotting for MTA1 expression in cells treated with VEGF (0, 10, 50 or 100 ng/ml) for 24, 48 or 72 h (n=3). VEGF, vascular endothelial growth factor; p, phosphorylated; VEGFR2, VEGF receptor 2; MTA1, metastasis-associated protein 1; KO, knockout.

