



Figure S1 M2 macrophage and *ESR2* in GC and its ovarian metastatic tumors. (A,B) Expression of ERβ in AGS and HGC27 after the transduction of siRNA targeting *ESR2* (si*ESR2* in short) and negative control siRNA (siNC in short). (C) Correlation between M2 macrophage and *ESR2* in TCGA-STAD cohort. (D,E) ERβ was significantly up-regulated in OM than PT by Western blot ($P=0.02$, $n=21$). (D) Selected paired examples showing the differential expression of ERβ between OM and matching PT. (E) Paired dots illustrating differential expression of ERβ between OM and PT. (F,G) Comparable expression of ERβ between PT and HM/PM by Western blot ($P=0.89$, $n=15$). (F) Selected examples showing the comparable expression of ERβ between PT and matching HM/PM. (G) Paired dots illustrating comparable expression of ERβ between HM/PM and PT. ERβ, estrogen receptor β; TCGA-STAD, The Cancer Genome Atlas Stomach Adenocarcinoma; OM, ovarian metastasis; GC, gastric cancer; PT, primary tumor; NS, not significant; HM, hepatic metastasis; PM, peritoneal metastasis.