

Expanded View Figures

Figure EV1. LncRNA CRNDE is upregulated in M2-polarized macrophage-derived exosomes (M2-exo).

LncRNA expressions in monocytes-derived exosomes (monocytes-exo) and M2-exo were measured by qRT–PCR. The results shown are from three biological replicates and are expressed as mean \pm SD. Student's *t*-test. **P* < 0.05, ***P* < 0.01 vs. monocytes-exo.







Figure EV2. Overexpressed LncRNA CRNDE in M2-exo-treated GC cells was transferred via exosomes rather than diffusion from the media due to exosomes dissociation.

- A Relative LncRNA CRNDE level in GC patients (n = 10) and healthy controls (n = 10) (the serum CRNDE levels were shown as CT values, and higher CT values indicate lower CRNDE levels). Data are expressed as mean \pm SD. Student's *t*-test.
- B LncRNA CRNDE expression in MGC-803 cells incubated with monocytes-exo or M2-exo was measured by qRT–PCR. **P < 0.01 vs. monocytes-exo. The results shown are from three biological replicates and are expressed as mean \pm SD. Student's t-test.
- C MFC and SGC7901 cells were incubated with Cy3-CRNDE-EXO (red) and cytochalasin D (Cyt D; 10 mg/ml) or brefeldin A (BFA; 20 mg/ml). Confocal microscopy was used to detect the Cy3-labeled CRNDE in cells. The nuclei were stained with DAPI (blue). Scale bar = 20 μ m.



Figure EV3. The exosomal transfer of LncRNA CRNDE induces CDDP resistance in GC cells.

A MFC cells were incubated with CDDP (0, 0.01, 0.1, 0.5, and 1 µg/ml) and BMDMs-exo/M2-exo, and then, the cell survival rate was measured.

B, C Exosomes were isolated from the medium of monocytes (monocytes-exo), monocyte-polarized M2 macrophages (M2-exo), monocyte-polarized M2 macrophages transfected with si-CRNDE (M2-si-CRNDE-exo), and monocyte-polarized M2 macrophages transfected with si-control (M2-si-control-exo). Then, MGC-803 cells were treated with indicated exosomes and CDDP (1 µg/ml) for 48 h. (B) LncRNA CRNDE expression and (C) cell survival rate were measured.

Data information: The results shown are from three biological replicates and are expressed as mean \pm SD. (A and B): one-way ANOVA; (C): Student's t-test. (A): **P < 0.01 vs. BMDMs-exo; (B, C): **P < 0.01



Figure EV4. Patient-derived xenograft model.

The tumor photos of xenografts tumors treated with CDDP + BMDMs-exo, CDDP + M2-exo, CDDP + M2-si-control-exo, or CDDP + M2-si-CRNDE-exo.



Figure EV5.

Figure EV5. si-CRNDE fails to affect CDDP sensitivity of cancer cells in vivo and the interplay between LncRNA CRNDE, PTEN, and NEDD4-1.

Mice were divided into CDDP + PBS and CDDP + si-CRNDE groups. 3×10^5 MFC cells resuspended in 200 µl PBS were subcutaneously injected into nude mice; ten days after injection, si-CRNDE (in PBS media) or its negative control (PBS) was injected into the center of the homograft tumors of mice, followed by a single intraperitoneal injection of CDDP. The (A) tumor volume, (B) tumor weight, and (C) CRNDE expression in the homograft tumors of CDDP-treated mice. (D) Biotinylated CRNDE-D1 (1–500 nt)/CRNDE-D2 (501–1,059 nt) RNAs were incubated with SGC7901 cell lysates, followed by Western blot. The results shown are from three biological replicates and are expressed as mean \pm SD.

Source data are available online for this figure.