

Figure S1. Western blotting results of AK4 knockdown and knockout, as well as AK4P1 overexpression. (A) Representative western blotting images used to determine relative protein expression levels in transfected PAAD cells. (B) Relative expression of AK4 in cells transfected with AK4-KD. (C) Relative expression of AK4 in cells transfected with AK4-KO. (D) Relative protein expression AK4P1 in cells transfected with AK4P1-OE. **** $P < 0.0001$. AK4, adenylate kinase 4; AK4P1, adenylate kinase 4 pseudogene 1; KD, knockdown; KO, knockout; NC, negative control; ns, not significant; OE, overexpression; PAAD, pancreatic adenocarcinoma.

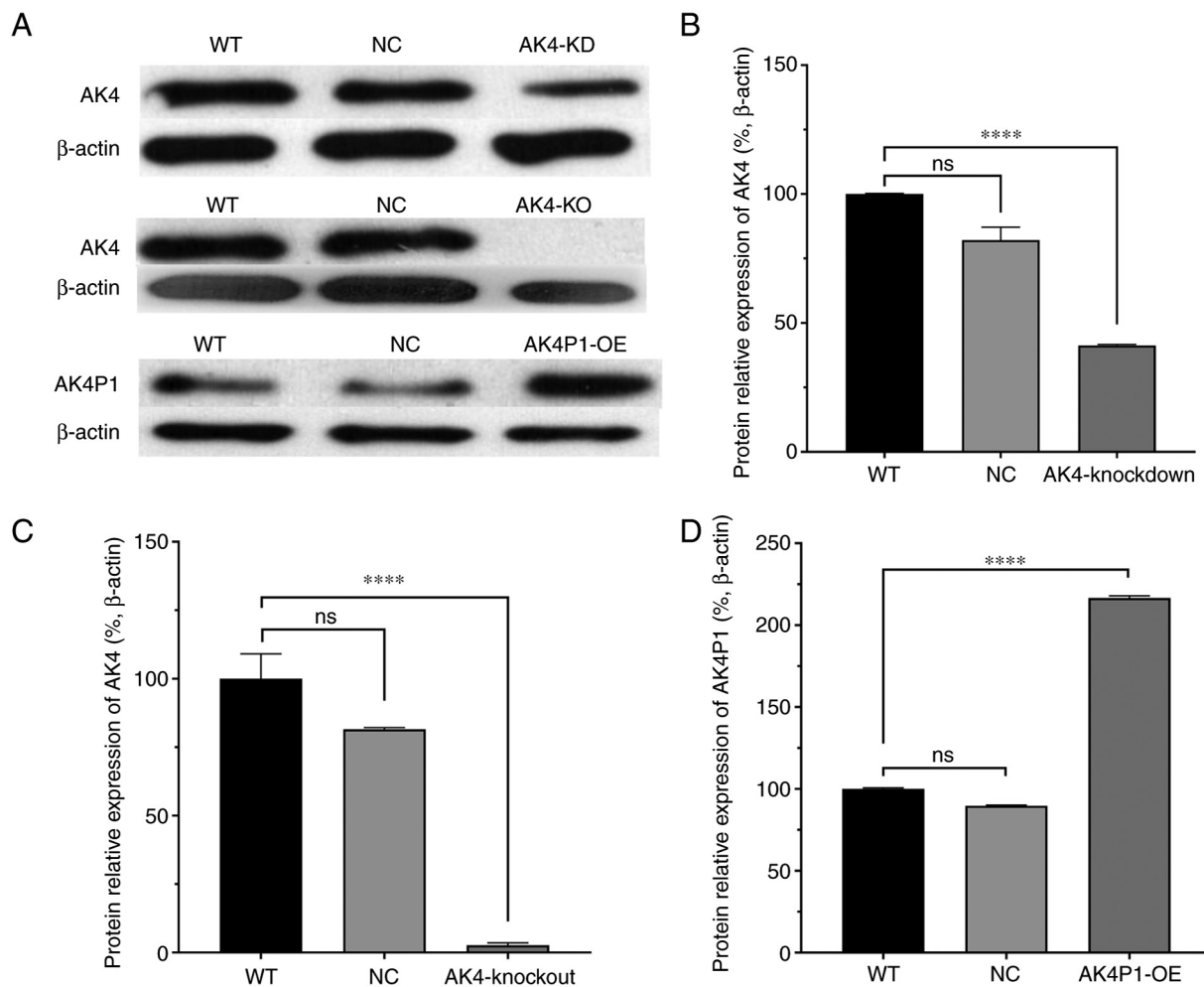


Figure S2. Exosomes verified by transmission electronic microscopy.

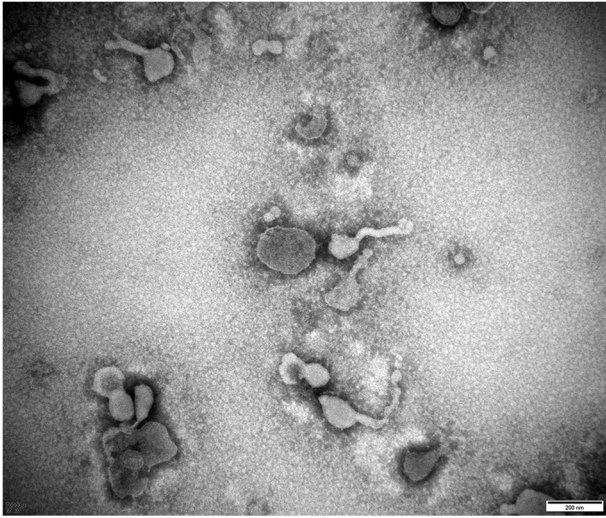


Figure S3. Apoptosis of different PAAD cells detected by TUNEL. AK4, adenylate kinase 4; AK4P1, adenylate kinase 4 pseudogene 1; KD, knockdown; KO, knockout; NC, negative control; OE, overexpression.

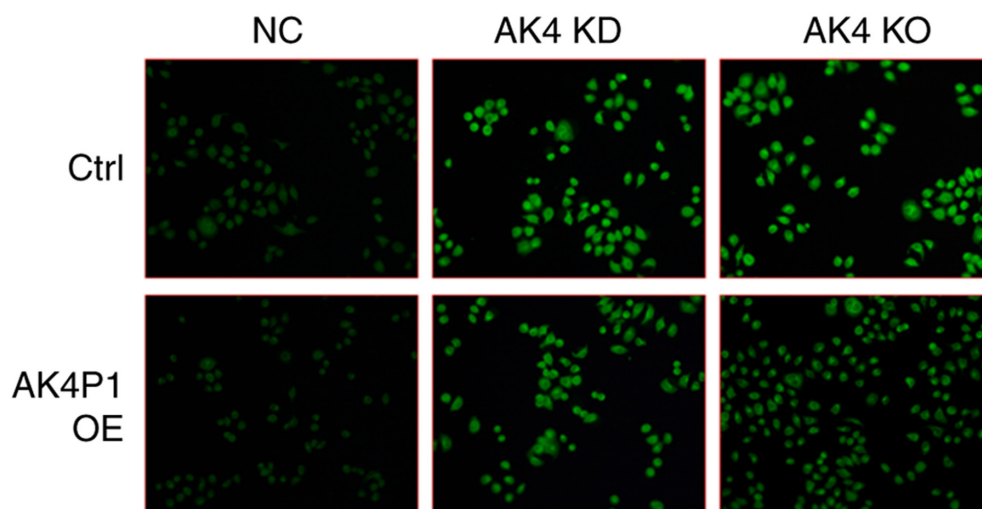


Figure S4. Apoptosis of different exosomes detected by TUNEL. AK4P1, adenylate kinase 4 pseudogene 1; exo, exosomes; NC, negative control; OE, overexpression; WT, wild-type.

