

Figure S1

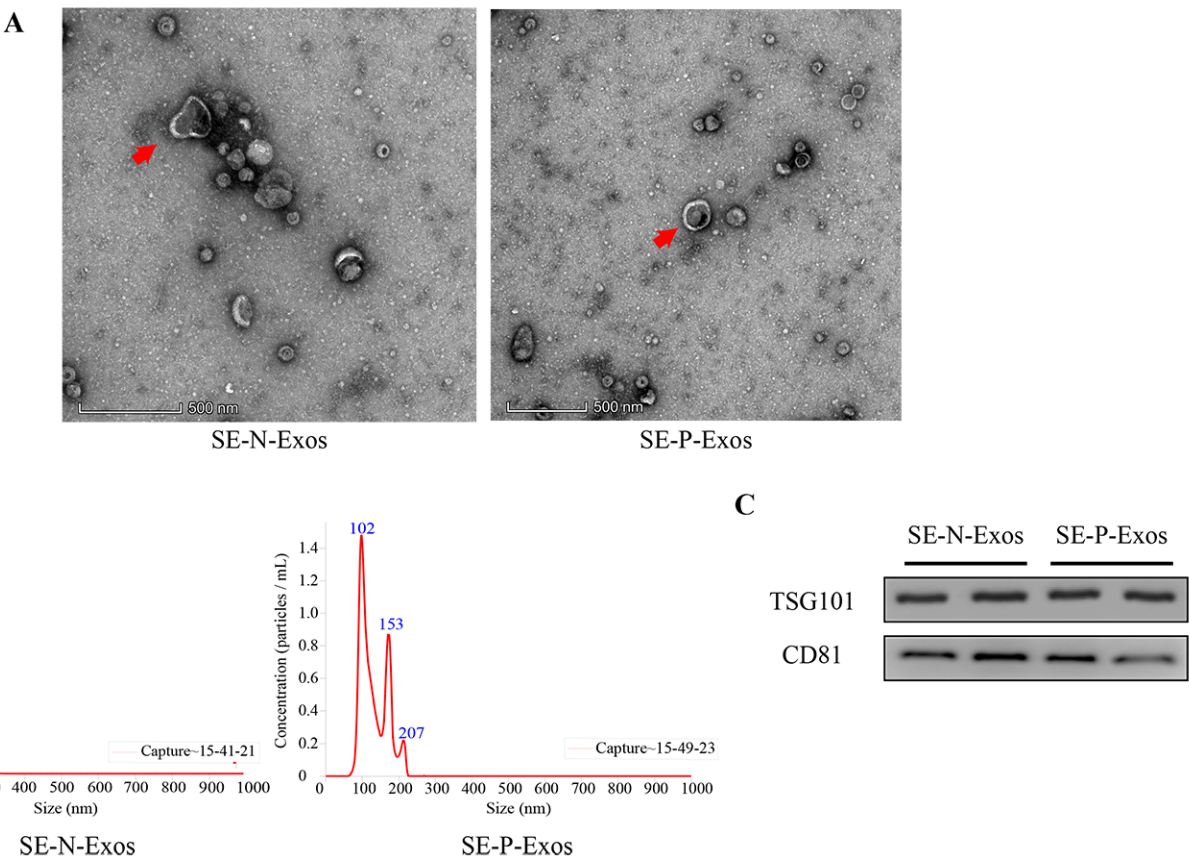


Figure.S1:Identification of semen exosomes from cocks. (A) Transmission electron microscope for observing morphology of exosomes. (B) Nanoparticle Tracking Analysis for analyzing SE-N-Exos and SE-P-Exos.(C) Western Blot analysis of the exosomal-marker proteins TSG101 and CD81. SE-N-Exos: semen exosomes of ALV-J-negative cocks, SE-P-Exos: semen exosomes of ALV-J-positive cocks.

Figure S2

pre-ALV-miRNA-p19-01		-----CUGGGAUCCCAUUACCGCGGCACUCA	CCCAGCGGGCAU	GGUACUU	GGGAAAT	Strain	
ALV subtypes	K	CCGGGGTCTCTGGGATCCCATTACCGCGGC	ACTCA	CCCAGCGGGCAAT	GGTACTT	GGGAAAT	JS13LY19
	J	CCGGGGTCTCTGGGATCCCATTACCGCGGC	ACTCA	CCCAGCGGGCAAT	GGTACTT	GGGAAAT	NX0101
		CCGGGGTCTCTGGGATCCCATTACCGCGGC	GCTCT	CCCAGCGGGCAAT	GGTACTT	GGGAAAT	SCAU1903
	E	CCGGGGTCTCTGGGATCCCATTACCGCGGC	ACTCA	CCCAGCGGGCAAT	GGTACTT	GGGAAAT	AF229
		CCGGGGTCTCTGGGATCCCATTACCGCGGC	ACTCA	CCCAGCGGGCAAT	GGTACTT	GGGAAAT	ALVE-B9
	D	CCGGGGTCTCTGGGATCCCATTACTGCGGC	GCTCT	CCCAGCGGGCAAT	GATAC	TTGGAAAAT	Schmidt-Ruppin D
	C	CCGGGGTCTCTGGGATCCCATTACCGCGGC	GCTAT	CCCAGCGGGCT	ATGATAC	TTGGGAAAT	Prague
	B	CCGGGGTCTCTGGGATCCCATTACCGCGGC	ACTCA	CCCAGCGGGCAAT	GGTACTT	GGGAAAT	GX14FF03
		CCGGGGTCTCTGGGATCCCATTACCGCGGC	ACTCA	CCCAGCGGGCAAT	GGTACTT	GGGAAAT	WD11150b
	A	CCGGGGTCTCTGGGATCCCATTACTGCGGC	ACTCA	CCCAGCGGCA	CAATGGTACTT	GGGAAAT	SDAU09E1
CCGGGGTCTCTGGGATCCCATTACCGCGGC		GCTCT	CCCAGCGGGCT	ATGGTACTT	GGGAAAT	SDAU09C3	

Figure.S2:Conserved analysis of ALV-miRNA-p19-01 among different ALV subtypes.

Figure S3

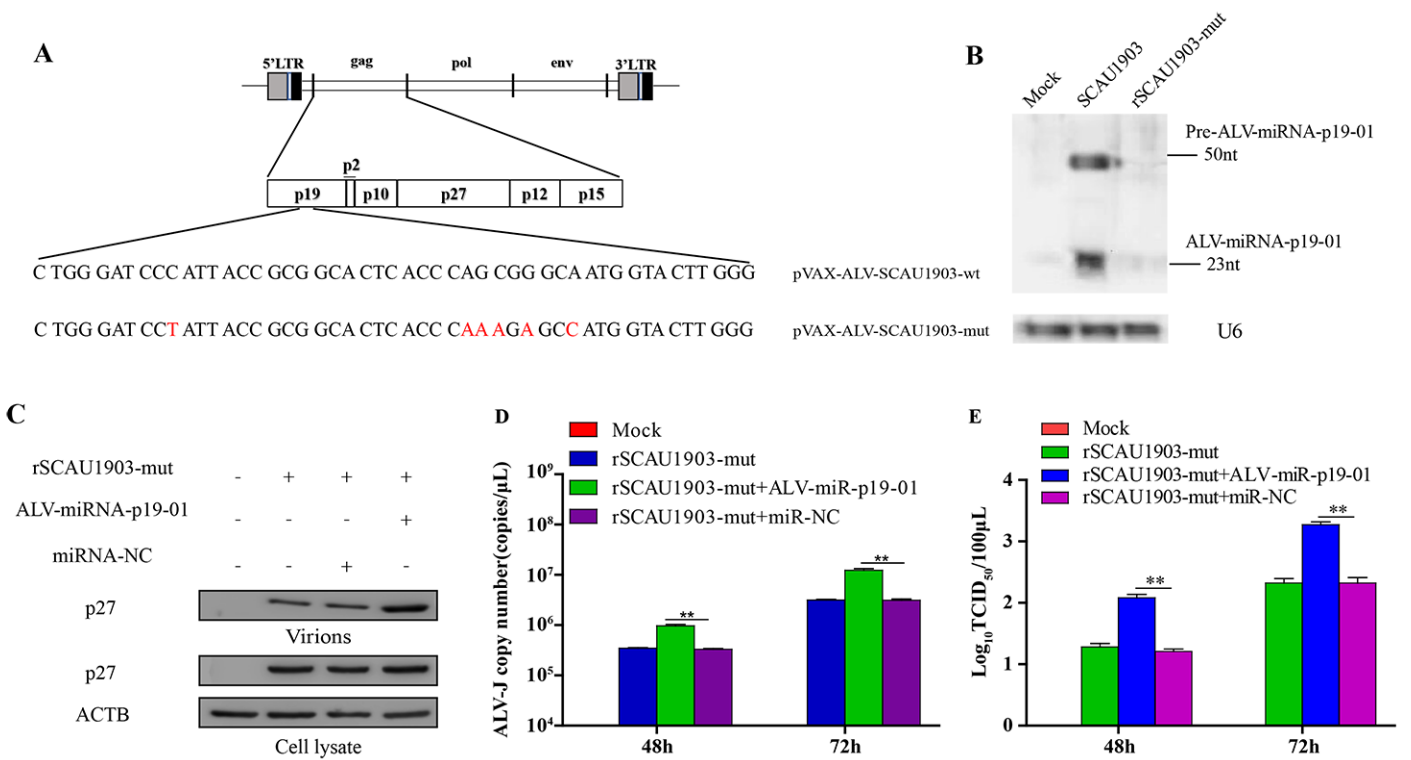


Figure.S3:ALV-miRNA-p19-01 promotes rSCAU1903-mut release. (A) Mutant sequence of pVAX-ALV-SCAU1903-mut compared to that of pVAX-ALV-SCAU1903-wt. (B) DF-1 cells were infected with ALV-J SCAU1903 or rSCAU1903-mut. The RNA was used to detect the ALV-miRNA-p19-01 by Northern Blot, U6 as a control. (C to E) DF-1 cells respectively transfected with ALV-miRNA-p19-01 mimic and miR-NC were infected with rSCAU1903-mut at 4 hpt. (C) The expression of p27 protein were examined by Western Blot. (D) The transcriptional level of viral particles in supernatants were measured by RT-PCR. (E) The supernatants from infected cells were titrated in DF-1 cells by ELISA for TCID₅₀.

Figure S4

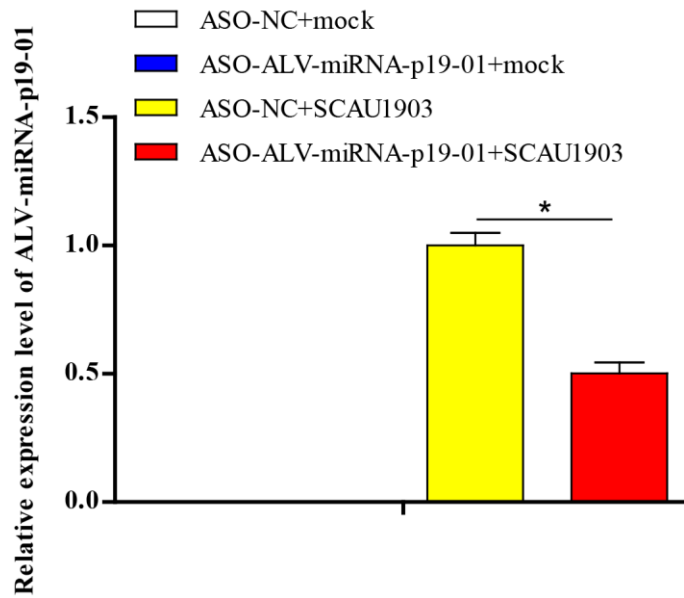


Figure.S4:The inhibitory efficiency of ASO-ALV-miRNA-p19-01. ASO-ALV-miRNA-p19-01 was transfected into DF-1 cells and then infected with ALV-J SCAU1903 at 4 hpt. ALV-miRNA-p19-01 expression was examined by RT-qPCR.

Figure S5

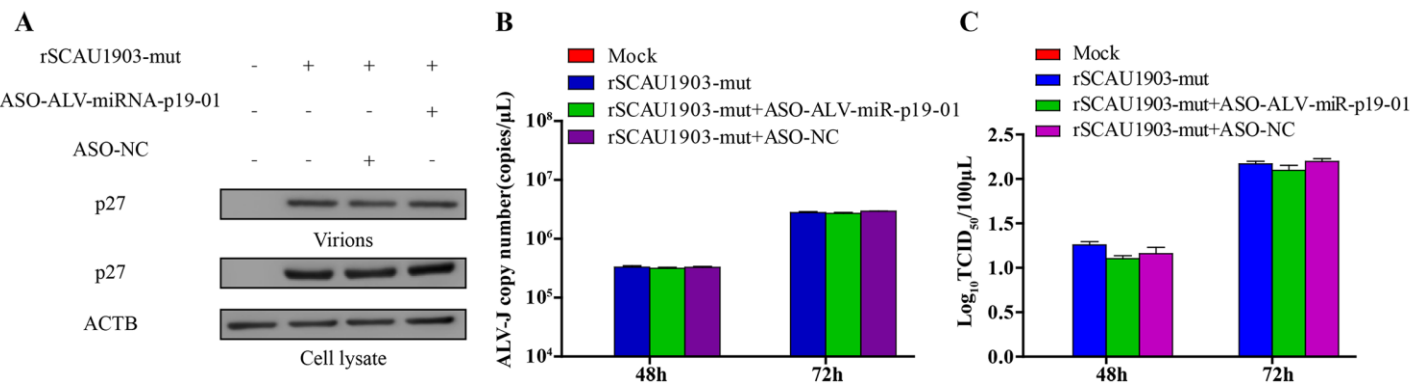


Figure.S5:ASO-ALV-miRNA-p19-01 does not affect rSCAU1903-mut release. (A to C) DF-1 cells respectively transfected with ASO-ALV-miRNA-p19-01 mimic and ASO-NC were infected with rSCAU1903-mut at 4 hpt. (A) The expression of p27 protein were examined by Western Blot. (B) The transcriptional level of viral particles in supernatants were measured by RT-PCR. (C) The supernatants from infected cells were titrated in DF-1 cells by ELISA for TCID₅₀.

Figure S6

