

Figure S1. RT-qPCR analysis of NOTCH3 pathway genes after transfection of miR-1299 mimics in OC CAOV3 cells. \* $P < 0.05$  and \*\* $P < 0.01$ ; ns, not significant. OC, ovarian cancer; NOTCH3, notch receptor 3; HES1, hairy and enhancer of split-1; HEY1, Hes related family BHLH transcription factor with YRPW motif 1; HEY 2, Hes related family BHLH transcription factor with YRPW motif 2; JAG1, Jagged canonical Notch ligand 1; PBX1, Pre-B-cell leukemia transcription factor 1.

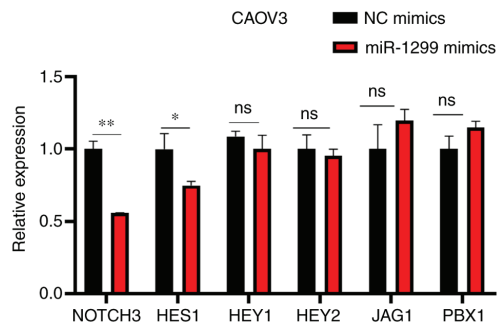


Figure S2. (A) Confirmation of NOTCH3 knockdown and NICD3 overexpression (OE) by western blot analysis in OC A2780 cells and NICD3 overexpression in OC SKOV3 cells. (B) RT-qPCR analysis of miR-1299 after NOTCH3 knockdown in A2780 cells and NICD3 overexpression in SKOV3 cells. \* $P < 0.05$  and \*\* $P < 0.01$ . NOTCH3, notch receptor 3; NICD3, NOTCH3 intracellular domain.

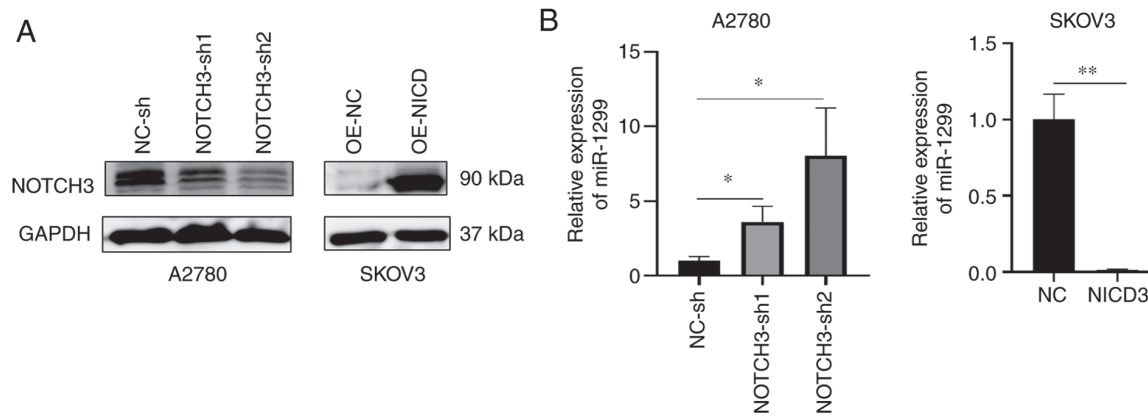


Figure S3. (A) Putative miR-1299 binding sites in XIST and (B) relative luciferase activity of reporter plasmids carrying wild-type (WT) XIST in OC A2780 cells co-transfected with NC or miR-1299 mimics. ns, not significant. OC, ovarian cancer; XIST, X-inactive specific transcript.

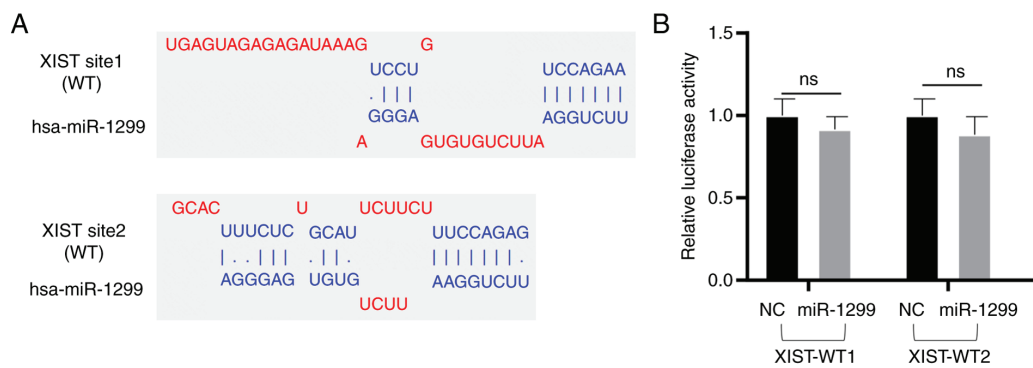


Table S1. PCR primers for this study.

	Gene symbol	Forward primer	Reverse primer	
Quantitative RT-PCR	NOTCH3	GTGTGTGTCATGGCTGGAC	GTGACACAGGAGGCCAGTCT	
	TUG1	AGGTAGAACCTCTATGCAITTTGTG	ACTCTTGCTTCACTACTTCCATCCAG	
	XIST	CGGGTCTTTC AAGGACAITTAGCC	GCACCAATACAGAGGAATGGAGGG	
	hsa-miR-1299	CCCTAACGGTTCTGGAATTCGT	TATGGTTGTTCA CGACTCCCTTAC	
	U6	CGCTTCGGCAGCACATATAC	TTCACGAATTTGGGTGTCATC	
	HE1	CCTGTCAATCCCGTCTACAC	CACATGGAGTCCCGCCGTA	
	HEY1	GTTCGGCTCTAGGTTCCATGT	CGTCGGCGCTTCTCAATTAATC	
	HEY2	GCCCGCCCTTGTCAGTATC	CCAGGGTCGGTAAGGTTTATTTG	
	PBX1	CATGCTGTTAGCGGAAGGC	CTCCACTGAGTTGTCTGAACC	
	JAG1	GTCCATGCAGAACGTGAACG	GCGGGACTGATACTCCCTTGA	
	Site-directed mutagenesis PCR	NOTCH3-3'UTR-WT	CITTTCCACCAACCCCTCCTG	GCTGGGCCAGAGGATTACC
		NOTCH3-3'UTR-MUT-F	CCTCACTTCACTGCAGATTGCCATTGGGACATGTTCC	GGAACATGTCCCAATGCAATCTGCAGTGAAGTGAGG
	TUG1-MUT1-F	NOTCH3-3'UTR-MUT-R	CTCTGAAGAAAGGCAACAT	AGTTGTAGCAGGATTCAGG
		TUG1-WT1	AAGGCTGCACCCAGATCAGCACAAAGGGCTTCTCTTGA	TCAAGAGAAAGCCCTTTGTGCTGATCTGGTGCAGCCCTT
TUG1-MUT1-F		GATTAGATGTTAGCCAGTTATG	CTGAAAAGTTAATCTGCTCCA	
TUG1-MUT1-R		AGAGACAGATAATCTCACTCGTGCAGAAATGACTTG		
TUG1-WT2		GAGA		
TUG1-MUT2-F				
TUG1-MUT2-R			TCTCCAAGTCAITTTCTGCACGAGTGAGATTACTGTCTCT	

NOTCH3, notch receptor 3; HES1, hairy and enhancer of split-1; HEY1, Hes related family BHLH transcription factor with YRPW motif 1; HEY2, Hes related family BHLH transcription factor with YRPW motif 2; JAG1, Jagged canonical Notch ligand 1; PBX1, Pre-B-cell leukemia transcription factor 1; WT, wild-type; MUT, mutant; R, reverse; F, forward.