

Appendix

Appendix A: **The Primers of PCR and qRT-PCR. (Table)**

Appendix B: **A**, The schematic diagram of RNA-seq process in amphoteric ESCs and PGCs. **B**, the cluster of RNA-seq in amphoteric ESCs and PGCs. **C**, the alignment of UBEI in amphoteric ESCs and PGCs via RNA-seq. **(Figure)**

Appendix C: Protein sequence alignment of UBEI in *Danio rerio* (Zebrafish), *Gallus gallus* (Chicken), *Pelodiscus sinensis* (Chinese soft-shelled turtle), *Xenopus laevis* (African clawed frog), *Homo sapiens* (Human) and *Mus musculus* (House mouse). **(Figure)**

Appendix D: The detection of viral titer of sh-UBE2I (A) and oe-UBE2I (B) in 293T cells. Scale bars: 100 μ m. **(Figure)**

Appendix E: The Morphology Reversal of the effects of UBE2I. **(Table)**

Supplementary Table1 The Primers of PCR and qRT-PCR

Gene		Primer Sequence (5'-3')	Accession	Purpose	Length
<i>UBE2I</i>	F	ATGTCTGGCATAGCTCTAAGTAGA	NM_204265.1	CDS amplify	477bp
	R	TTATGATGGTGCAAACCTTCTTGGCTT			
<i>UBE2I</i>	F	TCCAGGAAAGAAGGGGACAC	NM_204265.1	qRT-PCR	193bp
	R	AATTGTGATTGCTGGCCTCC			
<i>SOX9</i>	F	AAGGAGAGCGACGAGGACAAA	NM_204281.1	qRT-PCR	178bp
	R	GGTCCAGTCGTAGCCCTTGA			
<i>DMRT1</i>	F	GCCAGTTGTCAAGAAGAGCA	NM_001101831.1	qRT-PCR	174bp
	R	CAGCATATGGAGCAGCAGTG			
<i>WT1</i>	F	GGCATAACAAGATGTCCGACG	NM_205216.1	qRT-PCR	241bp
	R	GTCTTTGGTGCCGTTTCAGT			
<i>HINTW</i>	F	GAGGAGCCGTTGTGGACGAGG	NM_204688.2	qRT-PCR	148bp
	R	TCATCAAACGCCCAAGAAGAGG			
<i>FOXL2</i>	F	CCTCAACGAGTGCTTCATCA	NM_001012612.1	qRT-PCR	299bp

	R	ACATCTGGCAAGAGGCGTAG			
	F	ACTCAGGTCTCCCACATTGC			
<i>CYP19A1</i>	R	GTAGCTCCAGCCAGACAAGG	NM_174305.1	qRT-PCR	178bp
	F	ATTTGGTCTTCAACGAGT			
<i>AR</i>	R	TCCACTGGAATAATACTGA	NM_001040090.1	qRT-PCR	157bp
	F	CTGGGCAAAGAGAGTTCCAG			
<i>ESR</i>	R	GATTCCACCATGCCCTCTA	NM_205183.2	qRT-PCR	196bp
	F	CAGCCATCTTTCTTGGGTAT			
<i>β-actin</i>	R	CTGTGATCTCCTTCTGCATCC	NM_205518.1	qRT-PCR	169bp
