

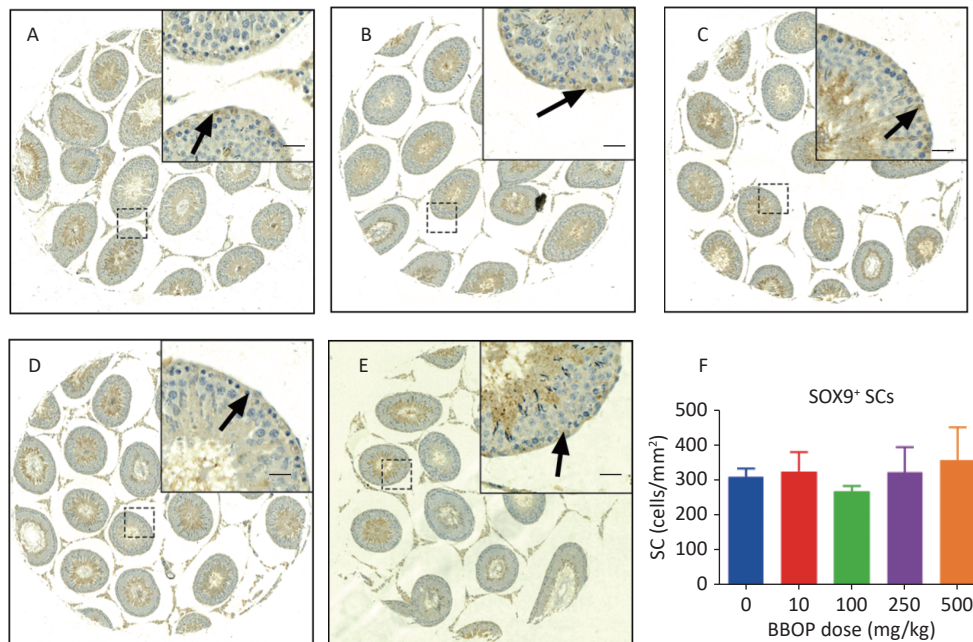
Supplementary Table S1. qPCR primer information

Symbol	Gene name	Primer	Sequences (5'to 3')	bp	Accession No.
<i>Lhcgr</i>	Luteinizing hormone receptor	Forward	CTGCGCTGCTCTGGCC	102	NM_012978
		Reverse	CGACCTCATTAAAGTCCCCTGAA		
<i>Star</i>	Steroidogenic acute regulatory protein	Forward	CCCAAATGTCAAGGAAATCA	187	NM_031558
		Reverse	AGGCATCTCCCAAAGTG		
<i>Scarb1</i>	Scavenger receptor class B member 1	Forward	ATGGTACTGCCGGGCAGAT	117	NM_031541
		Reverse	CGAACACCCTTGATTCTGGTA		
<i>Cyp11a1</i>	Cholesterol side chain cleavage	Forward	AAGTATCCGTGATGTGGG	127	NM_017286
		Reverse	TCATACAGTGTGCTTTTCT		
<i>Cyp17a1</i>	17 α -Hydroxylase/17,20-lyase	Forward	TGGCTTTCTGGTGACAATC	90	NM_012753
		Reverse	TGAAAGTTGGTGTTCGGCTGAAG		
<i>Hsd3b1</i>	3 β -Hydroxysteroid dehydrogenase 1	Forward	CCCTGCTCTACTGGCTTGC	189	NM_001007719
		Reverse	TCTGCTTGGCTTCTCCC		
<i>Hsd17b3</i>	17 β -Hydroxysteroid dehydrogenase 3	Forward	TGAAAGTTGGTGTTCGGCTGAAG	202	NM_054007
		Reverse	TGAAAGTTGGTGTTCGGCTGAAG		
<i>Hsd11b1</i>	11 β -Hydroxysteroid dehydrogenase 1	Forward	GAAGAAGCATGGAGGTCAAC	133	NM_017080
		Reverse	GCAATCAGAGGTTGGGTCAT		
<i>Sox9</i>	SRY-box transcription factor 9	Forward	GCAGCGTGGGGTTGTG	172	NM_138547
	Follicle-stimulating hormone receptor	Reverse	TGGATGATTGGGATGGTCA		
<i>Fshr</i>		Forward	CAAAGTCCAGCCCAATACC	327	NM_199237
		Reverse	AACCCCGACATAATCTTCA		
<i>Dhh</i>	Desert hedgehog	Forward	AACCCCGACATAATCTTCA	150	NM_053367
		Reverse	CTCGTCCCAACCTTCAGT		
<i>Nr5a1</i>	Nuclear receptor subfamily 5 group A1	Forward	CAGAGCTCAAAATCGACAA	187	NM_001191099
		Reverse	CCCGAATCTGTGCTTTCTTC		
<i>Ins13</i>	Insulin-like 3	Forward	GTGGCTGGAGCAACGACA	102	NM_053680
		Reverse	AGAAGCTGGTGAGGAAGC		
<i>Sod1</i>	Superoxide dismutase 1	Forward	GCCGTGTGCGTGCTGAAGG	99	NM_017050.1
		Reverse	TGTAATCTGTCTGACACCACAACCTG		
<i>Sod2</i>	Superoxide dismutase 2	Forward	TCCTGACCTGCCTTACGACTATG	130	NM_017051.2
		Reverse	TCGTGGTACTTCTCCTCGGTGAC		
<i>Cat</i>	Catalase	Forward	AGCGGATTCTCTGAGAGAGTGGTAC	147	NM_012520.2
		Reverse	CTGTGGAGAATCGGACGGCAATAG		
<i>Gpx1</i>	Glutathione peroxidase 1	Forward	TGCAATCAGTTCGGACATCAGGAG	129	NM_030826.4
	BCL2 apoptosis regulator	Reverse	CTCACCATTACCTCGCACTTCTC		
<i>BCL2</i>	BCL2 associated X apoptosis regulator	Forward	AGCGTCAACAGGGAGATGTC	204	NM_016993
		Reverse	TATGCACCCAGAGTGATGCA		
<i>Bax</i>		Forward	GACGCATCCACCAAGAAGCTGAG	134	NM_017059
		Reverse	GCTGCCACACGGAAGAAGACC		
<i>Lhb</i>	Luteinizing hormone subunit beta	Forward	CTGCTGCTGAGCCCAAGTGT	400	NM_012858
		Reverse	TGCTGGTGGTGAAGGTGATG		
<i>Fshb</i>	Follicle stimulating hormone subunit beta	Forward	CATTCAACCCACCTTGCTT	326	NM_001007597.2
		Reverse	GCTCCTCTCACTACCTGTC		
<i>Gnrhr</i>	Gonadotropin releasing hormone receptor	Forward	CTTGAAGCCCGTCTTGG	440	NM_031038
		Reverse	GCGATCCAGGCTAATCAC		
<i>Rps16</i>	Ribosomal protein S16	Forward	AAGTCTTCGGACGCAAGAAA	148	NM_001169146
		Reverse	TTGCCCAGAAGCAGAACAG		
<i>Gapdh</i>	Glyceraldehyde-3-phosphate dehydrogenase	Forward	GTCCATGCCATCACTGCCACTC	132	NM_017008.4
		Reverse	GATGACCTTGCCACAGCCTTG		

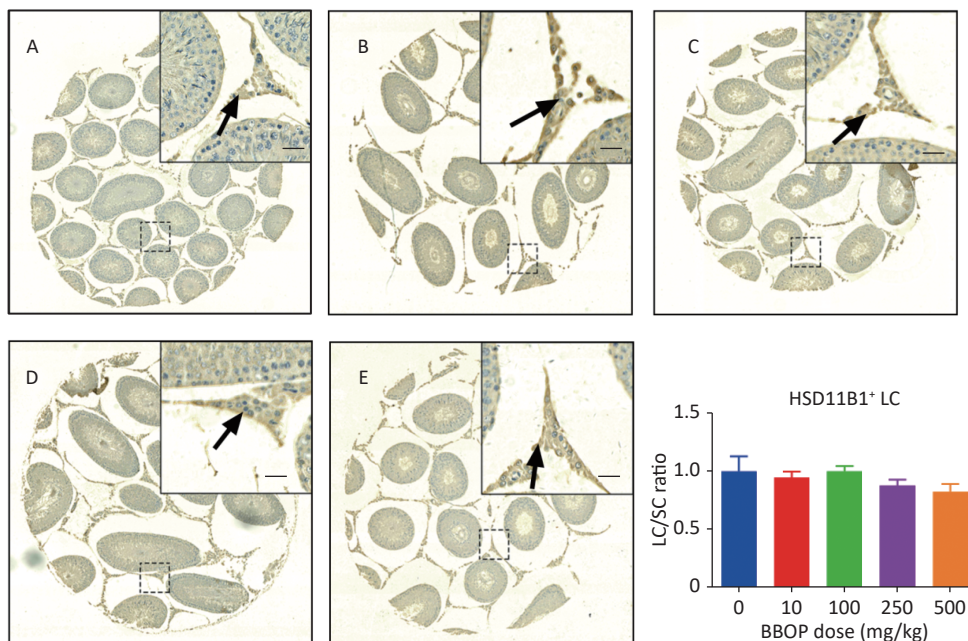
Supplementary Table S2. Antibody information

Antibody	Species	Vendor (City, State)	Dilution	
			WB	HS
GAPDH	Mouse	Cell Signaling Technology (Danvers, MA)	1:1,000	ND
CYP11A1	Rabbit	Cell Signaling Technology (Danvers, MA)	1:1,000	1:200
HSD11B1	Rabbit	Abcam (San Francisco, CA)	1:1,000	1:200
INSL3	Rabbit	Abcam (San Francisco, CA)	1:1,000	ND
DHH	Mouse	Santa Cruz Biotechnology (Dallas, TX)	1:100	ND
pmTOR	rabbit	Cell Signaling Technology (Danvers, MA)	1:1,000	ND
mTOR	rabbit	Cell Signaling Technology (Danvers, MA)	1:1,000	ND
ERK1/2	mouse	Cell Signaling Technology (Danvers, MA)	1:1,000	ND
pERK1/2	mouse	Cell Signaling Technology (Danvers, MA)	1:5,000	ND
AKT1	Rabbit	Cell Signaling Technology (Danvers, MA)	1:2,000	ND
pAKT1	Rabbit	Cell Signaling Technology (Danvers, MA)	1:5,000	ND
AKT2	Rabbit	Cell Signaling Technology (Danvers, MA)	1:1,000	ND
pAKT2	Rabbit	Cell Signaling Technology (Danvers, MA)	1:1,000	ND
BAX	Rabbit	Abcam (San Francisco, CA)	1:1,000	ND
BCL2	Rabbit	Cell Signaling Technology (Danvers, MA)	1:1,000	ND
SOD1	Rabbit	Cell Signaling Technology (Danvers, MA)	1:1,000	ND
SOD2	Rabbit	Cell Signaling Technology (Danvers, MA)	1:1,000	ND
PGC1 α	Rabbit	Abcam (San Francisco, CA)	1:1,000	ND
SIRT1	Rabbit	Cell Signaling Technology (Danvers, MA)	1:1,000	ND

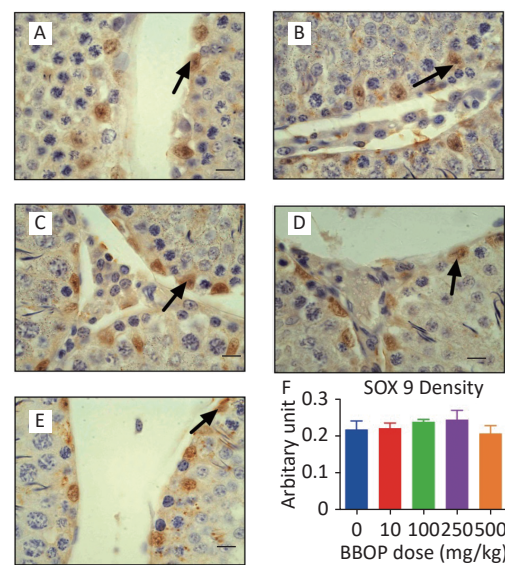
Note. ND = Not detected; WB = Western blot; HS = Histochemical staining.



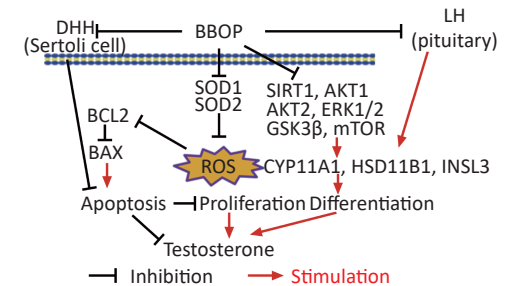
Supplementary Figure S1. Immunohistochemical staining of SOX9 and Sertoli cell (SC) number in the testis after BBOP exposure from postnatal day (PND) 35 to 56. Panels A–E, SOX9 staining for 0, 10, 100, 250, and 500 mg/kg BBOP group, respectively; Black arrow points to SOX9 staining; Scale bar = 20 μm; Panel F, quantitation of SC number; Mean ± SEM, $n = 6$. There was no significant difference in the BBOP group versus the control (0 mg/kg).



Supplementary Figure S2. Immunohistochemical staining of HSD11B1 and Leydig cell (LC) number in the testis after BBOP exposure from postnatal day (PND) 35 to 56. Panels A–E, HSD11B1 staining for 0, 10, 100, 250, and 500 mg/kg BBOP group, respectively; Scale bar = 20 μm; Panel F, quantitation of LC number [normalized to Sertoli cell (SC) number]; Mean ± SEM, $n = 6$. There was no significant difference in the BBOP group versus the control (0 mg/kg).



Supplementary Figure S3. Semi-quantitative measurement SOX9 density in the testis after BBOP exposure from postnatal day (PND) 35 to 56. Panels A–E, SOX9 staining for 0, 10, 100, 250, and 500 mg/kg BBOP group, respectively; Black arrow points to SOX9 staining; Scale bar = 20 μm. Panel F, SOX9 density; Mean ± SEM, *n* = 6. There is no significant difference in the BBOP group versus the control (0 mg/kg).



Supplementary Figure S4. Graphical abstract.