

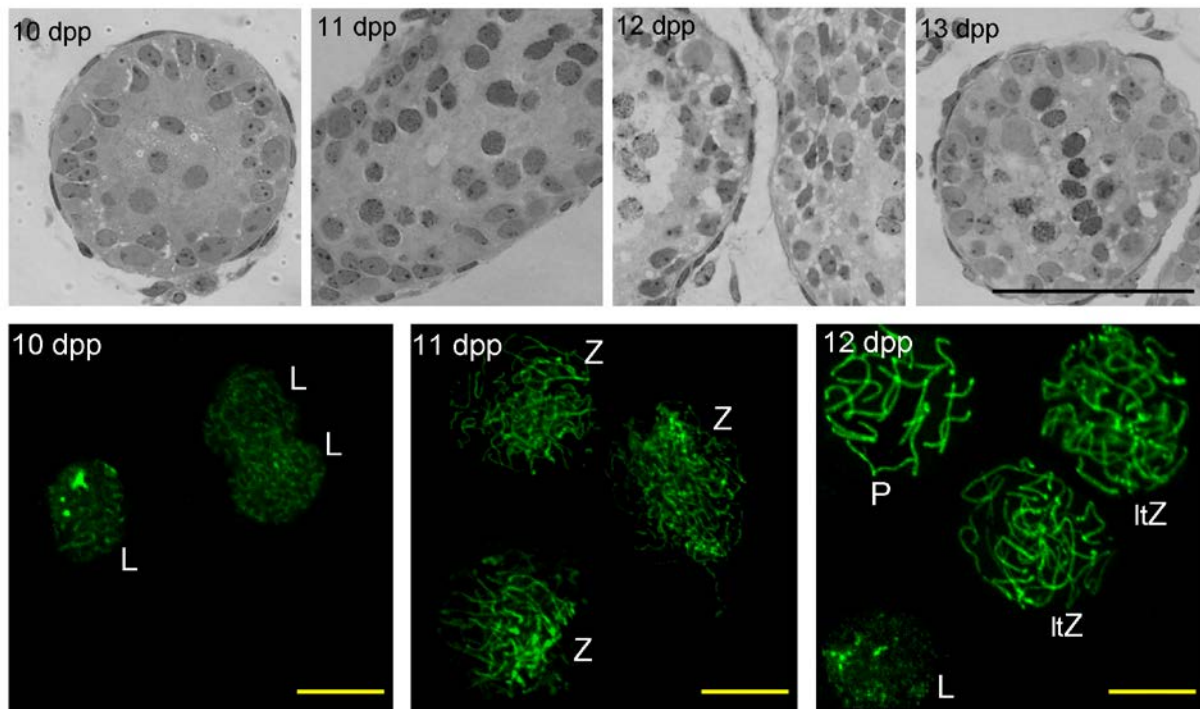


Figure S1. Testicular cell content evaluation in pre-pubertal mice. **A.** Epon-embedded cross sections of seminiferous tubules in 10-13 dpp pups, stained with toluidine blue. Bar: 50 μm . **B.** Analysis of meiotic prophase stages by confocal immunocytochemistry with anti-SYCP3 antibody (green) in whole testicular cell suspensions of 10-12 dpp pups. L, Z and P spermatocyte nuclei are indicated. ItZ: late zygonema. Bar: 10 μm .

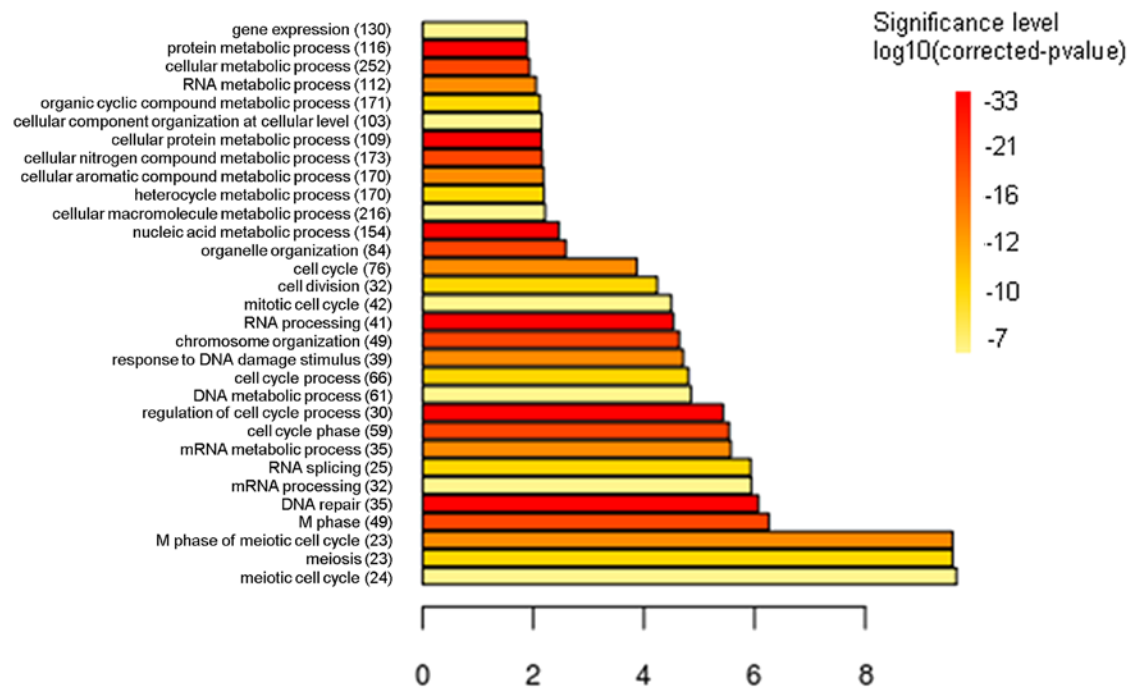


Figure S2. Enrichment analysis of biological process GO terms of genes showing an expression peak in LZ.

Table S1. Sequencing yield of individual samples.

Sample	# raw data	# reads after QC	% of aligned reads
2C	48,538,544	48,397,424	71.3
LZ	65,340,234	62,740,060	80.3
PS	61,988,530	59,359,696	80.2
RS	47,409,618	45,022,546	56.2

Table S2. List of primers used for qRT-PCR in this study.

Gene	Forward primer	Reverse primer	Product size
<i>Atp8b3</i>	CTCAAGGTTCTCCCCGAGAT	ACCAGGCTAACAGCTCCACA	135
<i>Clgn</i>	CATCAAGCCAGCCATCAGGT	GATGACAGAGCCAAGATCCC	115
<i>Col1a1</i>	GGTTTCCACGTCTCACCATT	CGGCTCCTGCTCCTCTTAG	116
<i>Dazl</i>	CTAGGCAGCCACCTCACG	TCCATCCTAACATCAATTCCTCC	240
<i>Dnahc8</i>	AGCTGAGGTATACGAGCATC	CAGCAGCCTGAGTGACCTAA	105
<i>Ldhc</i>	TCGTATCAGCGTCAACAAGG	GTGGTCGGAGTTGGAAATGT	94
<i>Ppp1cc</i>	CATATCTTGAGTGGTGCTTCA	GACAGCATCATCCAACGGCT	158
<i>Prm1</i>	GCTCACAGGTTGGCTGGCTC	TGATGGACTTGCTATTCTGTGC	251
<i>Spa17</i>	CTCAGAATCTCCCGTGTCAGCC	ACACTGGAACCATCCGCACC	155
<i>Sycp3</i>	TGTGGGGACAGCGACAGC	TACTTCACCTCCAACATCTTCA	253
<i>Tax1bp1</i>	AGTGTGCATTAGGAAGGTAAC	CTACGCTGAGAGGCAGTGG	176
<i>Tcte3</i>	TGAGTCATCAAACGGAGGTTC	AGGAAGCCTAGCATGTTCG	108
<i>Tex15</i>	GAAACGGATTCTGTTGCCATG	GCTTCTCATCAACCAGTCCCA	106
<i>Tnp1</i>	CATCACAAGTGGGATCGGTA	TCAAGAGAGGTGGAAGCAAGA	100
<i>Top2A</i>	TGTGTTCAACAACAGGGATTC	GAGATTCTAGTTAATGCTGCTGATA	133