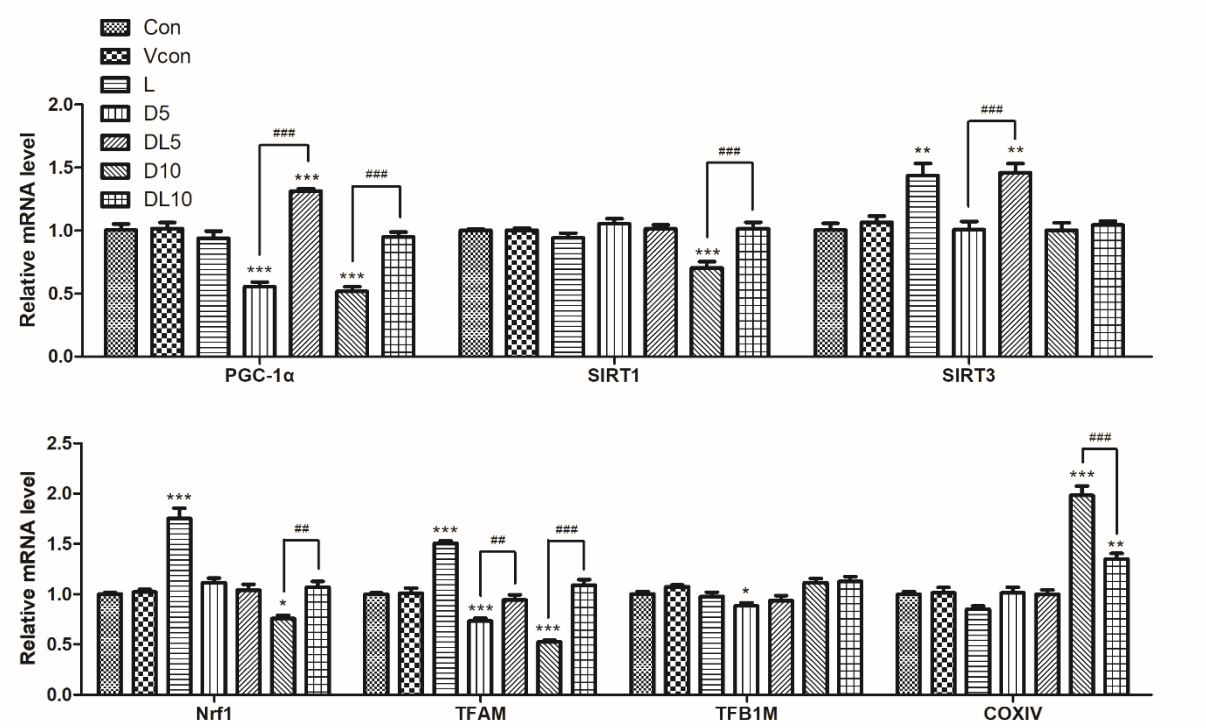
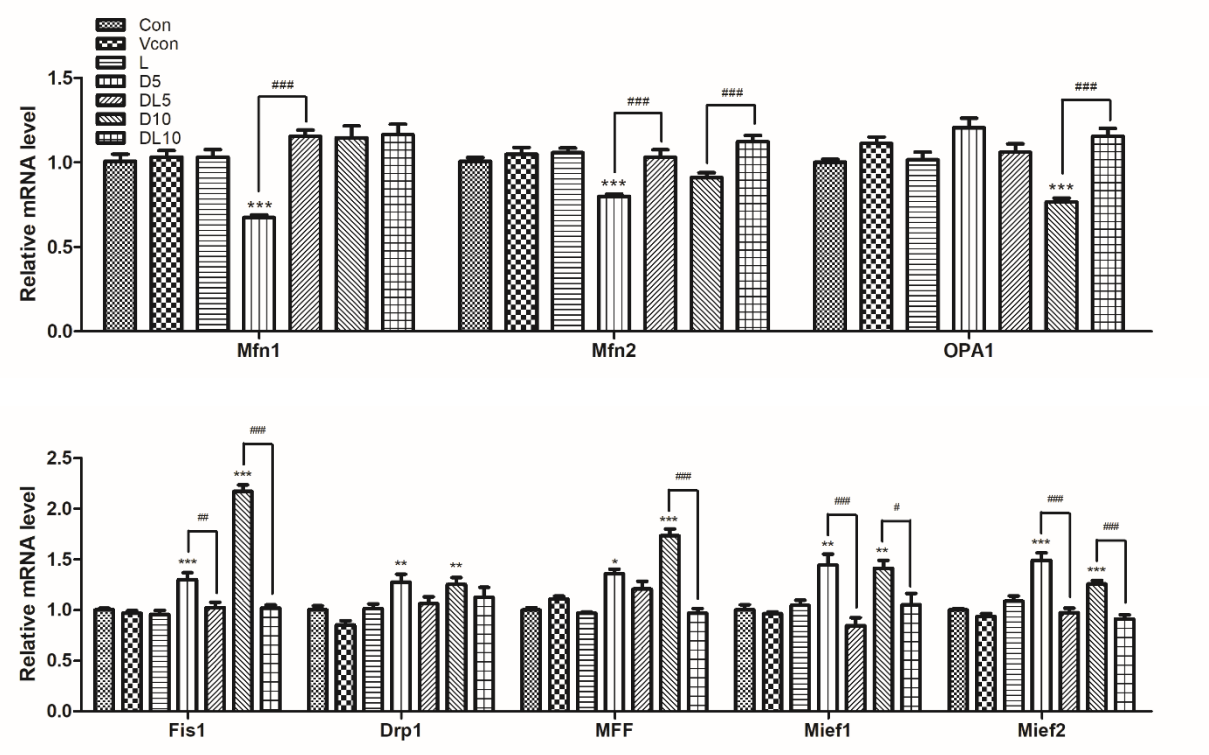
Supplemental Materials

Figure S1. The mitochondrial biogenesis related mRNA expression of testis.



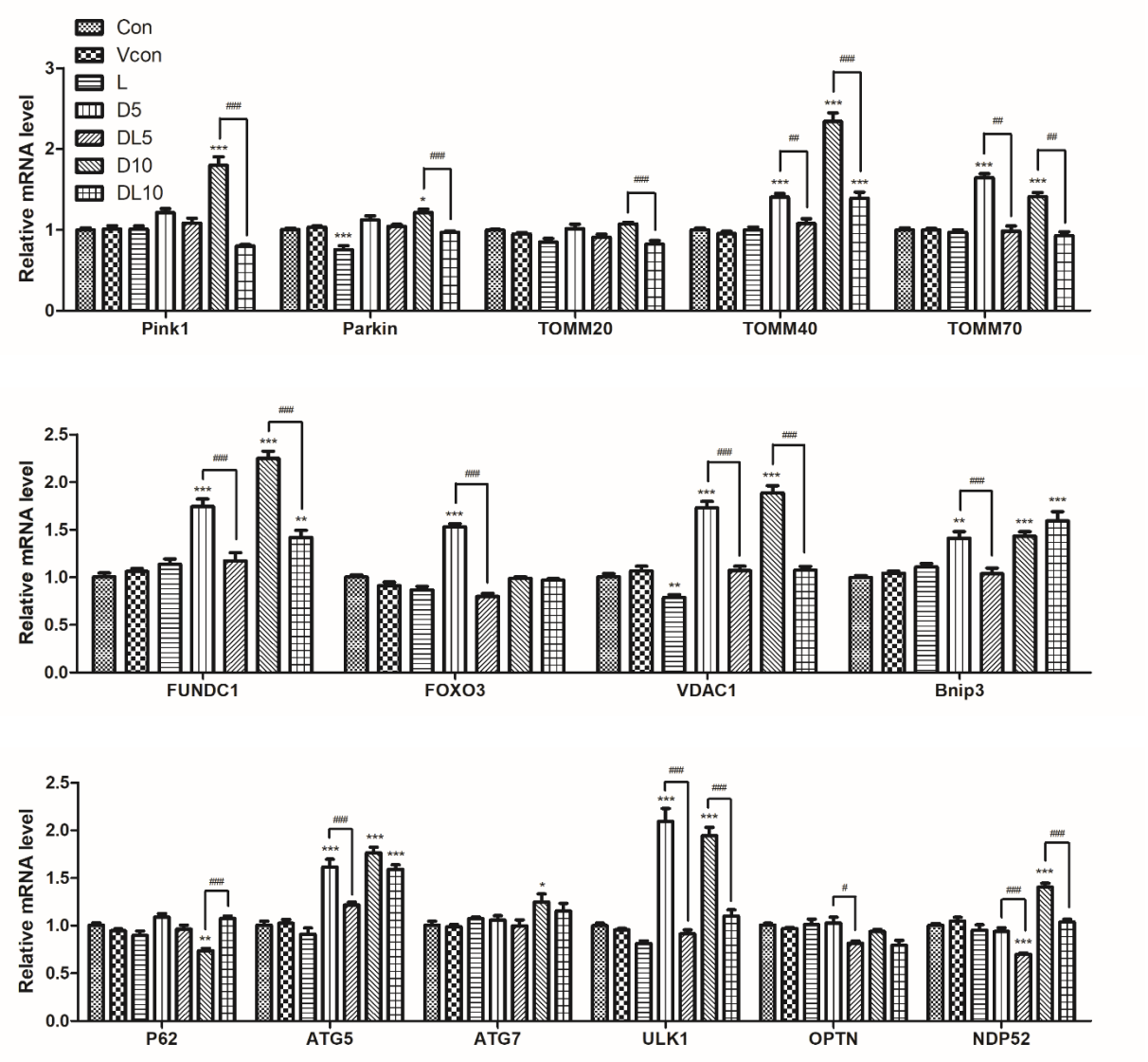
Data are presented as the mean ± SEM. Symbol for the significance of differences between the vehicle control group and another group: *P < 0.05, **P < 0.01. Symbol for the significance of differences between the DEHP-treated groups and the DEHP + 5 mg/kg LYC treatment group: #P < 0.05.

Figure S2. The mitochondria dynamics related mRNA expression of testis.



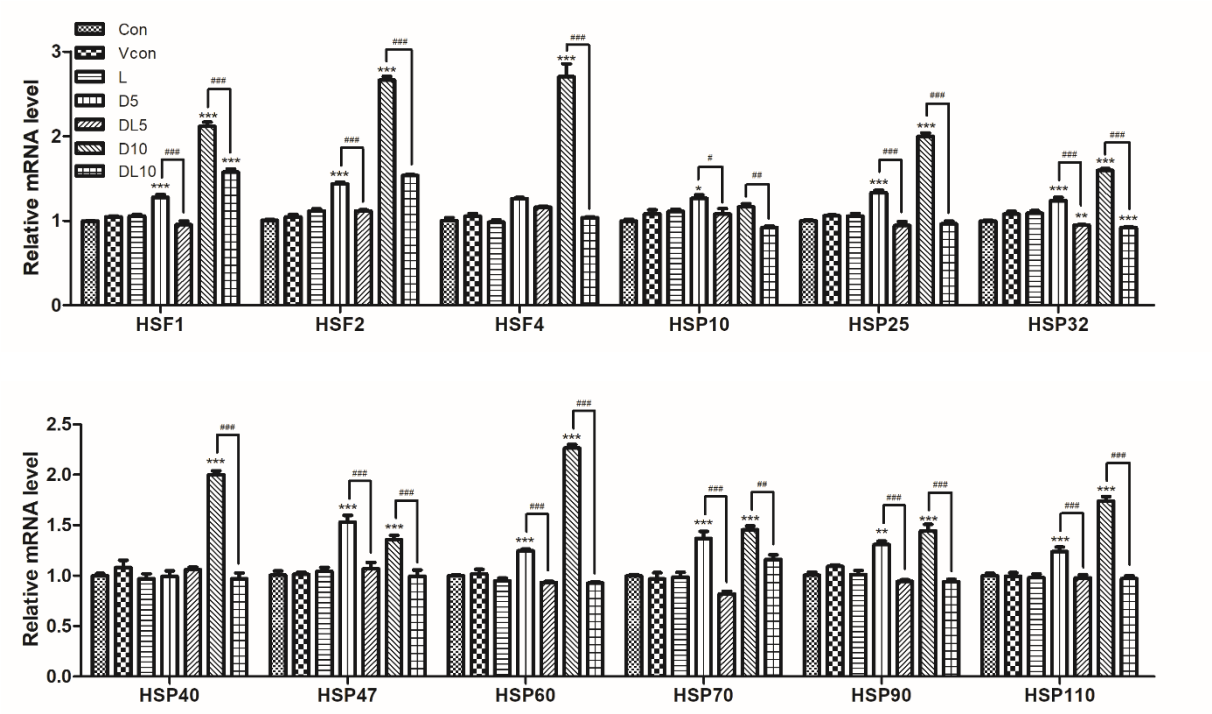
Data are presented as the mean ± SEM. Symbol for the significance of differences between the vehicle control group and another group: *P < 0.05, **P < 0.01. Symbol for the significance of differences between the DEHP-treated groups and the DEHP + 5 mg/kg LYC treatment group: #P < 0.05.

Figure S3. The mitophagy related mRNA expression of testis.



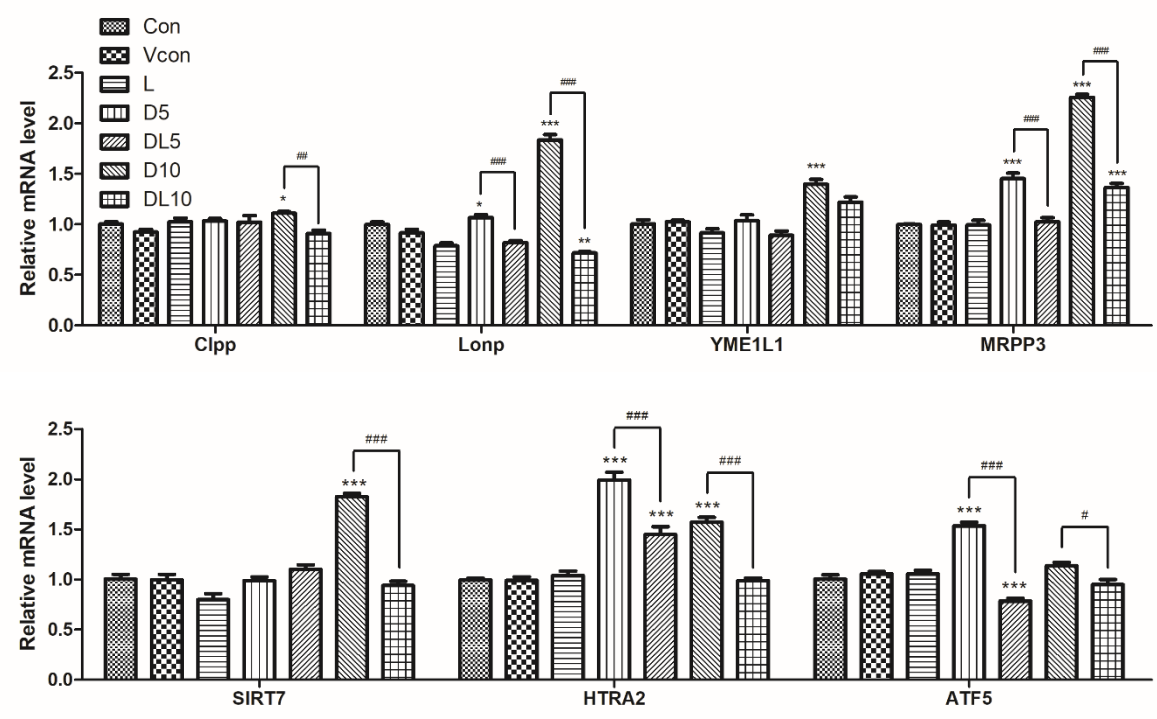
Data are presented as the mean ± SEM. Symbol for the significance of differences between the vehicle control group and another group: *P < 0.05, **P < 0.01. Symbol for the significance of differences between the DEHP-treated groups and the DEHP + 5 mg/kg LYC treatment group: #P < 0.05.

Figure S4. The HSR-related mRNA expression of testis.



Data are presented as the mean ± SEM. Symbol for the significance of differences between the vehicle control group and another group: *P < 0.05, **P < 0.01. Symbol for the significance of differences between the DEHP-treated groups and the DEHP + 5 mg/kg LYC treatment group: #P < 0.05.

Figure S5. The UPR^{mt} -related mRNA expression of testis.



Data are presented as the mean ± SEM. Symbol for the significance of differences between the vehicle control group and another group: *P < 0.05, **P < 0.01. Symbol for the significance of differences between the DEHP-treated groups and the DEHP + 5 mg/kg LYC treatment group: #P < 0.05.

Table S1. Sequences of oligonucleotide primers for QRT-PCR.

Gene Names	Sequence(5' → 3')	NCBI Reference Sequence	Amplicon size (bp)
GADPH	AAGGTCGGTGTGAACGGATT CAACAATCTCCACTTTGCCACT	NM_001289726.1	82
β-actin	CAAGAGAGGTATCCTGACCT TGATCTGGGTCATCTTTTCAC	NM_007393.5	188
HSF1	ATGACACCGAGTTCCAGCATC CACGCTGGTCACTTTCCTCT	NM_001331152.1	83
HSF2	AAATCCAAGCCAGACAAACAAC TACTCCCCTGTTCAATAGCAGA	NM_008297.3	97
HSF4	CCAGTACTTCAAGCACAGCAAC ACCTTGCTCGATGCTCACC	NM_001256042.1	88
HSP25	CAGTCAGCGGAGATCACCAT TGTTCAGACTTCCCAGCTTC	NM_145499.2	99
HSP32	AGGTACACATCCAAGCCGAGA TACAAGGAAGCCATCACCAG	NM_013560.2	80
HSP40	CCTCGAACAACATTCCAGCAG ACCACAGAGAGCCTCCCGAA	NM_018808.3	125
HSP47	GCCCCAAGCTGTTCTATGCC TCTCGCATCTTGTCTCCCT	NM_009825.2	115
HSP60	CCACTGTTCTGGCACGAT ATCCACAGCCAACATCACACC	NM_010477.4	101
HSP70	CCCGCCTACTTCAACGACT TCGTTGATGATCCGCAGCAC	NM_010479.2	86
HSP90	TGACATCATCCCCAACCCTC TTCGTGCCAGACTTAGCAA	NM_008302.3	114
HSP110	CAGAAGAAAGCAAAACCCCAG GCAGCTCAACATTTACCACCT	XM_021162272.1	105
PGC-1α	ATCAGAACAAACCCTGCCAT ACGTCTTTGTGGCTTTTGCT	XM_006503774.4	90
Sirt1	AGCAACATCTCATGATTGGCAC TCATATCATCCAGCTCAGGT	NM_019812.3	90
Sirt3	CCACGGGACCTTTGTAACAGC TGTCCGCCATCACATCAGC	NM_022433.2	86

Nrf1	ATGCTTCAGAACTGCCAACCAC GCCCAGTTTTGTTCCACCT	NM_001164226.1	85
TFAM	AGGAAAAGCAGGCATATATTCAGC ATCGTTTCACACTTCGACGGAT	NM_009360.4	129
TFB1M	TAGAGCCCAAGATCAAGCAG ATAACATTCCAAGCCCTCGGT	NM_146074.3	102
COXIV	ACCGCATCCAGTTTAACGAG CAAATCAGAACGAGCGCAGT	NM_009941.3	115
Mfn1	TTCTGAGTTTCATCCTACCCC CGATCAGCCAAATTTCTTCCCA	NM_024200.4	96
Mfn2	AGCAAGTTGACATCACCCGAGA AAGTGAATCCAGAGCCTCGAC	NM_001285920.1	80
OPA1	CCGCTTCATGACAGAACCCAA CCTCGGCAAAGTCGTTCCAC	NM_001199177.1	113
Fis1	ACGCAATTTGAATATGCCTGGT CGCTGTTCCTCTTTGCTCCC	NM_025562.3	113
Drp1	CAAGAAAACTGTCTGCCCGAGA TTACTGCCTTTGGGACACTG	NM_152816.3	114
MFF	ACAACGTCAGGTATGGCATT GAAGCTGCATCTACCACAGT	NM_029409.3	82
Mief1	GACGGCTGACCATATCCAAC TTCTCACGACGAACCAGGA	NM_001357659.1	120
Mief2	CTGCCCTGTCACTTCAACCC ACAGCACGTAGCCAATGTCA	NM_001009927.2	82
Pink1	CCACCTTTCCCTTTGCCAT GCTCCTGGCTCATTTTGCTT	NM_026880.2	87
Parkin	AGCCTTGTCCTCGCTGCAAC CACCACTCCAGCTTGCACT	NM_016694.4	91
TOMM20	AGACTCTTCCGCCACCAG CACATCATCTTCAGCCAAGCTC	NM_024214.2	98
TOMM40	CAGCCTCAATGCACAGGTCA TCCACCTGCCAGTTCACGAA	NM_001109748.1	99
TOMM70	ACGTTTATCACCACCGAGGACA CAAACTTCTGAGCCTGCGCCAA	NM_138599.5	127

FUNDC1	TCTTCAGGTTGCCAGTCACA GCTGCTTTATTTGCTCGCTTC	NM_028058.4	108
VDAC1	TCTGCCAACACGGAAACCAC TTCTCTGTAAACGTCAGCCCAT	NM_001362693.1	86
Bnip3	CTCCTGGGTAGAACTGCACT TACTTCGTCCAGATTCATGCT	NM_009760.4	122
P62	CTCATCTTTCCCAACCCCTT GCCAGCCAAAGTGTCCAT	NM_011018.3	91
ATG5	ACAGCTGCACACACTTGGA TCATCACCTGGCTCCTCT	NM_053069.6	89
ATG7	CTTCTGGCACGAACTGACCC CACAGACCAGCAGAGTCACCA	NM_001253717.1	105
ULK1	CCTACAGACTGCCATTGACCA ACGCTCATTTAGTCTGCGTACCAC	NM_001347394.1	88
OPTN	AGAAGTCCAGGTTAGCCACT TGTCCACCTTTTCTGCCTGT	NM_001356487.1	114
NDP52	CATGGCAACTTCTCTCAGGT AATCCAGTCCTTGCGTCGAG	NM_001271018.1	120
Clpp	TCATTGCCCAGCTGTTGT CAGGCCCGCAGTTACCAC	NM_017393.2	95
Lonp	GGTCGTATCATCAATGGCTT TTCCCCAGCTTGTCAACCTC	NM_025827.3	80
YME1L1	TCCTCTTTGTTTTGCTCCTGT TACCGCAGAATCAAGTCCTGT	NM_013771.5	98
MRPP3	CTGTTAAACCTACTACCCCTCC GCCCATTGTTGTCATTCCCT	NM_025373.1	93
Sirt7	CGCCATCTCAGAGCTCCA CGCTCAGTCACATCAAACACT	NM_153056.3	96
HTRA2	GATCCTAGACCGGCACCCTT TGAGCCCATCTGAAGCCACT	NM_019752.3	83
ATF5	CTTGCCCACCTTTGACCTCC GGTTGACAAGCCTGAATCCC	NM_030693.2	106

Table S2. Total Variance Explained of PCA

Total Variance Explained (Mitophagy)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Total	% of Variance	Total	% of Variance
1	5.571	61.895	61.895	5.571	61.895	61.895
2	1.340	14.885	76.780	1.340	14.885	76.780
3	.915	10.170	86.949	.915	10.170	86.949
4	.691	7.672	94.622			
5	.277	3.078	97.700			
6	.130	1.440	99.140			
7	.044	.490	99.630			
8	.024	.266	99.896			
9	.009	.104	100.000			

Extraction Method: Principal Component Analysis (PCA).

Table S3. Total Variance Explained of PCA

Total Variance Explained (HSR)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Total	% of Variance	Total	% of Variance
1	9.160	76.329	76.329	9.160	76.329	76.329
2	1.249	10.408	86.738	1.249	10.408	86.738
3	.587	4.894	91.631	.587	4.894	91.631
4	.473	3.938	95.569			
5	.232	1.930	97.499			
6	.122	1.019	98.519			
7	.088	.734	99.253			
8	.034	.285	99.538			
9	.024	.200	99.738			
10	.017	.143	99.880			
11	.010	.082	99.962			
12	.005	.038	100.000			

Extraction Method: Principal Component Analysis (PCA).

Table S4. Total Variance Explained of PCA

Total Variance Explained (UPR^{mt})

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Total	% of Variance	Total	% of Variance
1	3.851	55.021	55.021	3.851	55.021	55.021
2	1.467	20.959	75.980	1.467	20.959	75.980
3	1.000	14.284	90.264	1.000	14.284	90.264
4	.366	5.234	95.498			
5	.200	2.863	98.361			
6	.080	1.137	99.498			
7	.035	.502	100.000			

Extraction Method: Principal Component Analysis (PCA).