

Selenized yeast protects against cadmium-induced follicular atresia in laying hens by reducing autophagy in granulosa cells

Supplementary Materials:

Table S1. Gene-special primers for qPCR.

Gene	Orientation	Primer sequence (5'-3')	Accession number	Product size
mTOR	Forward	CATGCCAAAAGGTCTTGCCC	XM_040689168.1	240
	Reverse	AAGTGGATGGAAGGCGTGAG		
Beclin1	Forward	AGAACCAGATGCGTTATGCTCA	NM_001006332.1	129
	Reverse	GGAGACGGCCAAGTCTGAAG		
ATG5	Forward	GCTATCACCCCTGAAGATGGA	NM_001006409.2	76
	Reverse	G		
Dynein	Forward	GTGGTGTTTCCAGCATTTGGC	NM_001277879.1	115
	Reverse	CCTCGGCCAAGTCGCTATTC		
LC3-I	Forward	AAGAAGGCTGAAGGAACTGGG	XM_417327.6	143
	Reverse	TTACACCCATATCAGATTCTTG		
LC3-II	Forward	ATTCCAACCTGTCCCTCA	XM_040666873.1	89
	Reverse	CCCCACAAAGATCCCGGTAAT		
GAPDH	Forward	CCTCGGGGACGAGAACTTG	NM_204305.2	111
	Reverse	GGGGAAAGTCATCCCTGAGC		
		TTGGCTGGTTTCTCCAGACG		

Table S2. The effects of Cd and Se supplementation on hen-day production of laying hens.

Item	stage (weeks)	Main effect of diet (mg/kg)				SEM	Main effect of time/weeks		SEM	P -Value		
Item	Time/weeks	CON	Se	Cd	Cd+Se	SEM	1~4	5~8	SEM	Treat	Time	Treat* Time
Hen-day production/%	1~4w	86.83a	87.94a	87.15a	87.29a							
	5~8w	86.66a	86.43a	77.28b	85.28a							
	Overall	86.74	87.19	82.21	86.29	0.431	87.30a	83.91b	0.280	<.0001	<.0001	<.0001

Values with different letter superscripts mean significant difference ($P < 0.05$). Data show the mean \pm SEM. Other laying performance were not listed in afore table, because the number of hens used in this study was limited.