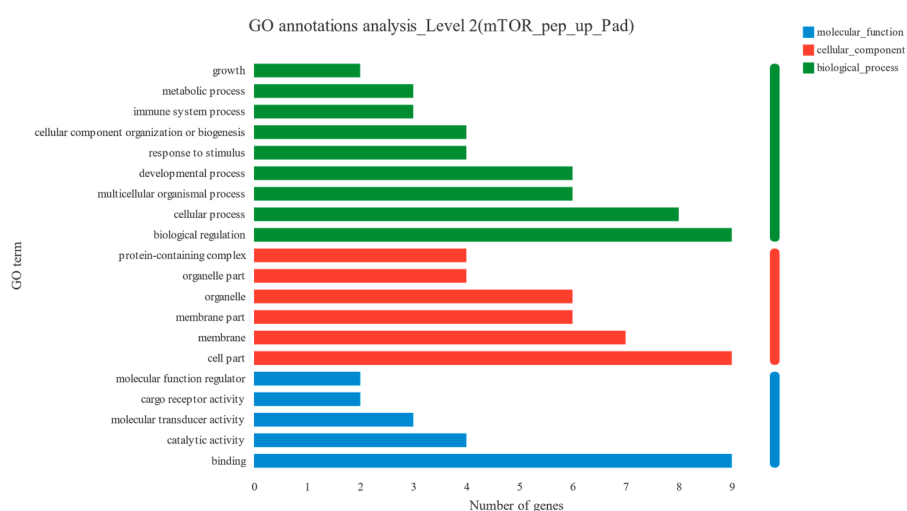
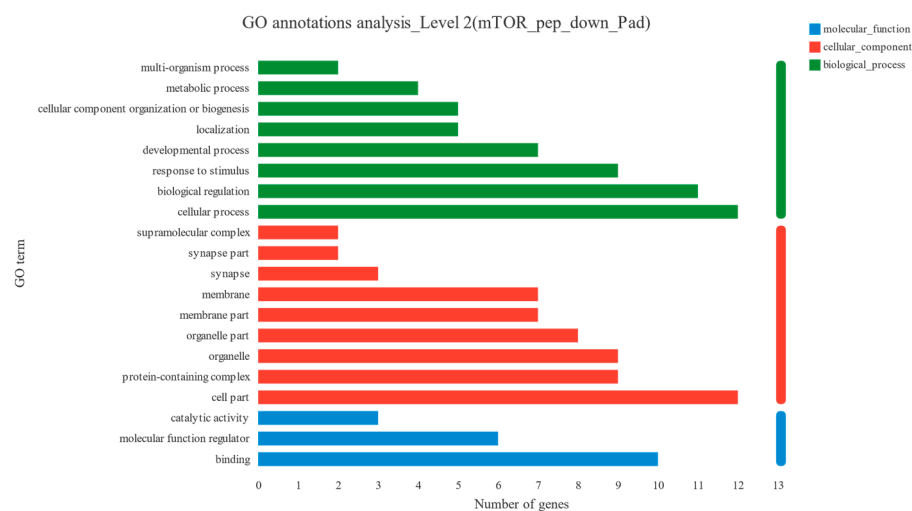


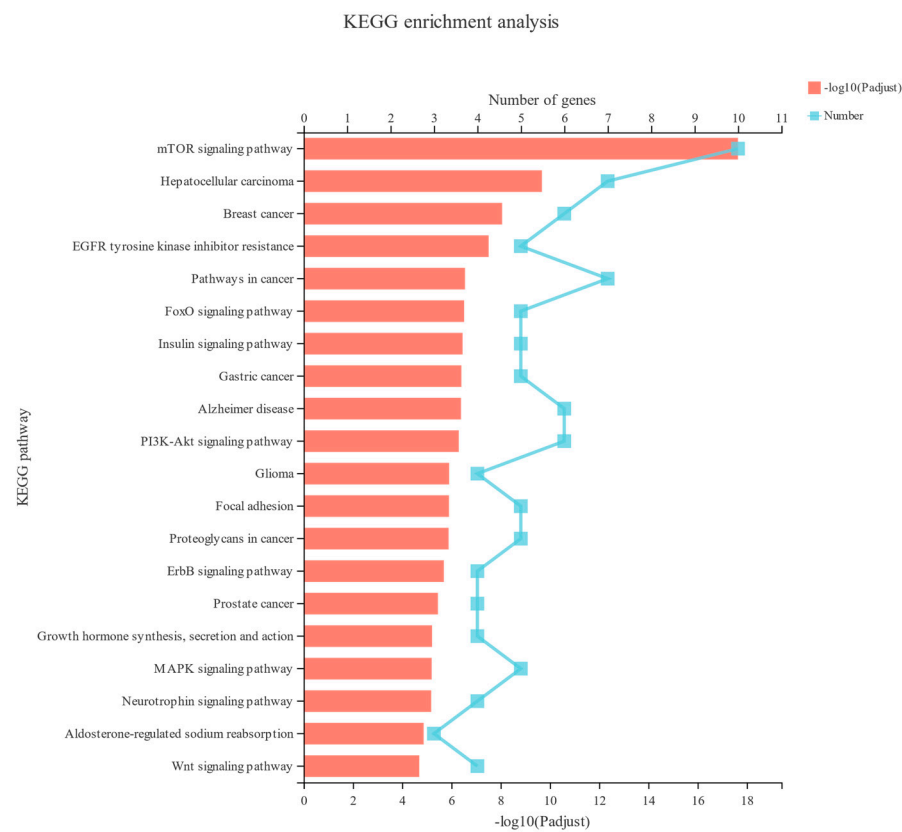
**Figure S1** The cluster heat map of differentially expressed genes in zein peptides group.



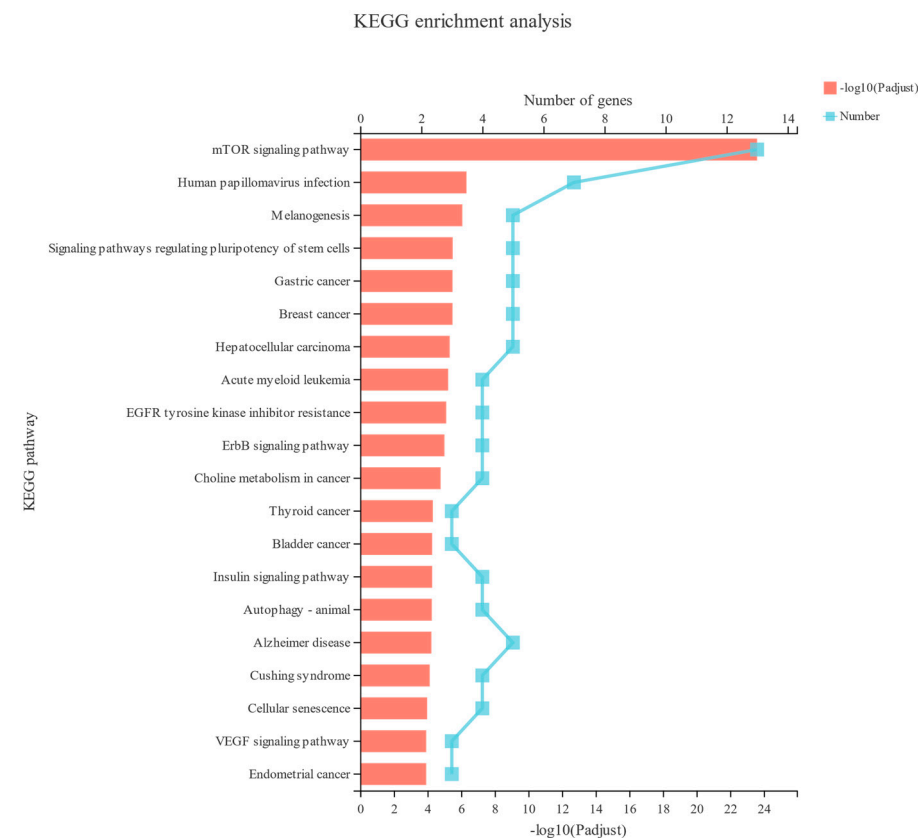
**Figure S2A** GO annotations of up-regulated genes in zein peptides group.



**Figure S2B** GO annotations of up-regulated genes in zein peptides group.



**Figure S3A** The functionally enriched KEGG pathways based on the up-regulated genes.



**Figure S3B** The functionally enriched KEGG pathways based on the down-regulated genes.

**Table S1. The representative zein peptide sequences identified by LC-MS/MS**

<b>Peptides sequence</b>	<b>Intensity</b>	<b>Precursor protein</b>
<b>LLPPYLPS</b>	2.06E+11	z1B alpha zein protein
<b>SNIPLSPL</b>	1.67E+11	z1A alpha zein protein
<b>FLPPVTSM</b>	1.48E+11	z1C alpha zein protein
<b>SLLPPYLPS</b>	1.44E+11	z1B alpha zein protein
<b>SLLPPYLSPA</b>	1.33E+11	Z1A alpha zein protein
<b>ENPILQPY</b>	8.45E+10	Z1A alpha zein protein
<b>LLPPYLSPA</b>	5.58E+10	Z1A alpha zein protein
<b>YQQPIIGGA</b>	4.69E+10	prolamin 19 kDa alpha zein z1A1_5 precursor
<b>ENPALQPY</b>	3.87E+10	prolamin 19 kDa alpha zein z1B_6 precursor
<b>GFEHPAVQ</b>	3.57E+10	z1C alpha zein protein
<b>RQQLLNPL</b>	3.11E+10	22 kDa alpha-zein 14 precursor
<b>RFEYPTIQ</b>	2.16E+10	z1D alpha zein protein
<b>YQQPIIGG</b>	1.67E+10	prolamin 19 kDa alpha zein z1A2_1 precursor
<b>QRQQLLNPL</b>	1.66E+10	22 kD alpha-zein
<b>LLPPYLSP</b>	1.49E+10	Z1A alpha zein protein
<b>AAPNAGTLL</b>	1.43E+10	prolamin 19 kDa alpha zein z1A1_7 precursor
<b>LPPYLSPA</b>	1.41E+10	Z1A alpha zein protein
<b>QLLPFYYPQ</b>	1.04E+10	z1D alpha zein protein
<b>ENPIVQPY</b>	9.87E+09	prolamin 19 kDa alpha zein z1A2_2 precursor
<b>FLRPVTSM</b>	5.33E+09	22-kDa alpha zein 8

Note: The bold front indicates BCAA.