

Supplement information for

(Epi)catechin damage effects on the development of mouse intestinal epithelial structure through the PERK-eIF2 α -ATF4-CHOP pathway.

Shijie Guo^{a#}, Weiwei Huang^{a#}, Qingqing Cao^c, Qingbin Guo^a, Jianzhong Han^{a,b*}, Yumei Qin^{a,b*}

^a School of Food Science and Biotechnology, Zhejiang Gongshang University, Hangzhou 310018, China.

^b Food Safety Key Laboratory of Zhejiang Province, School of Food Science and Biotechnology, Zhejiang Gongshang University, Hangzhou, China.

^c Tea Research Institute, Chinese Academy of Agricultural Sciences, Key Laboratory of Tea Biology and Resources Utilization, Ministry of Agriculture, Hangzhou 310008, China.

S. G and W. H equally contribute to this article

* To whom correspondence should be addressed.

E-mail: yqin@zjgsu.edu.cn

hanjianzhong99@163.com

This file includes Figure S1 and Table S1, S2.

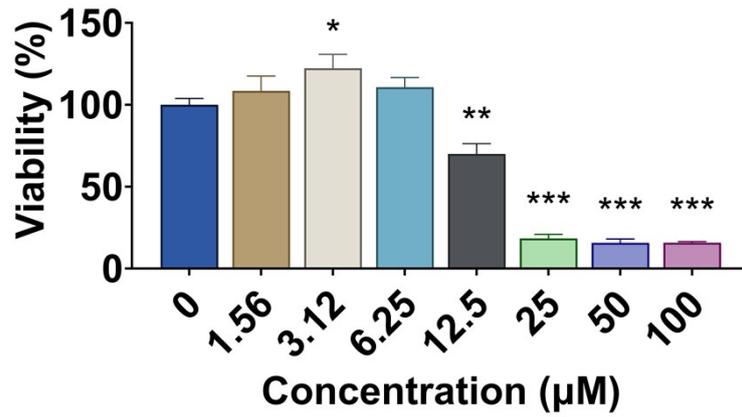


Figure S1. Effects of different concentrations of GSK2606414 on organoid viability. GSK2606414 pretreated the newly passed organoids for 1h and then incubated them for 48 hours after being stimulated by 0.3 mM EGCG for 1 h. Data was expressed as mean \pm SEM.

* $p < 0.05$ 、 ** $p < 0.01$ 、 *** $p < 0.001$.

Table S1. Scoring standards for the disease activity index (DAI).

Score	Weight loss (%)	Fecal viscosity	Fecal occult blood
0	≤1	Normal	Non-color
1	>1-5		Pale blue
2	>5-10	Soft	Blue
3	>10-15		Blue grey.
4	>15	Liquid	Blue black

Table S2. Primer sequences used in qRT-PCR.

Gene name	Primer sequence (5'-3')
<i>Gapdh</i>	F: GCATGGCCTTCCGTGTTCTTA R: GATGCCTGCTTCACCACCTTCT
<i>Perk</i>	F: CTCCTCTACCCATTCAGCACC R: CTTGAACCATCATATGCTCTTGGG
<i>Bip</i>	F: CTGCGTGTGTGTGAGACCAG R: AGCAGTCAGGCAGGAGTCTTA
<i>Atf4</i>	F: TAAGTTGTGTGCTCGGGTGT R: GATTTTCGTGAAGAGCGCCA
<i>Chop</i>	F: CTGGAAGCCTGGTATGAGGAT R: CAGGGTCAAGAGTAGTGAAGGT
<i>Gadd34</i>	F: CTCTAAAAGCTCGGAAGGTACAC R: GGCTTCGATCTCGTGCAAAC
<i>Ero1</i>	F: GGAAGAAGAGACTGTGCCGT R: CTTTCTGGGTCTCCTCACTCA
<i>Dr5</i>	F: ACTACACCAGCCATTCCAACC R: CCGTCAGTGCAGTTAGAGCA
<i>Bcl2</i>	F: TGGCCTTCTTTGAGTTCGGT R: ATAGTTCCACAAAGGCATCCCAG
<i>Claudin3</i>	F: GTACAAGACGAGACGGCCAA R: CGTACAACCCAGCTCCCATC
<i>Occludin</i>	F: TTGAAAGTCCACCTCCTTACAGA R: CCGGATAAAAAGAGTACGCTGG
<i>Zo1</i>	F: GGAGATGTTTATGCGGACGG R: CCATTGCTGTGCTCTTAGCG
<i>Lgr5</i>	F: GAGTCAACCCAAGCCTTAGTATCC R: CATGGGACAAATGCAACTGAAG