Absorption and immune-modulating effects of active peptides from *Hericium erinaceus* protein treated with gastrointestinal model in *vitro*

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Table S1 The primer sequence of qRT-PCR

Gene name	Primer sequence
ZO-1	Forward 5’-CGGTCCTCTGAGCCTGTAAG-3’ Reverse 5’-GGATCTACATGCGACGACAA-3’
Claudin-1	Forward 5’-AACGCGGGGCTGCAGCTGTTG-3’ Reverse 5’-GGATAGGGCCTTGGTGTTGGGT-3’
occludin	Forward 5’-TCCTATAAATCCACGCCGGTTC-3’ Reverse 5’-CTCAAAGTTACCACCGCTGCTG-3’

Table S2 The alkaline phosphatase activity of AP and BL

Time（d）	The alkaline phosphatase activity of AP （μmol pNPP/min）	The alkaline phosphatase activity of BL （μmol pNPP/min）	AP /BL
1	0.116±0.030e	0.107±0.004d	1.080±0.030e
6	0.144±0.009d	0.115±0.003c	1.252±0.051d
11	0.234±0.005c	0.127±0.002b	1.853±0.004c
16	0.296±0.005b	0.130±0.002b	2.274±0.023b
21	0.485±0.022a	0.157±0.003a	3.094±0.169a

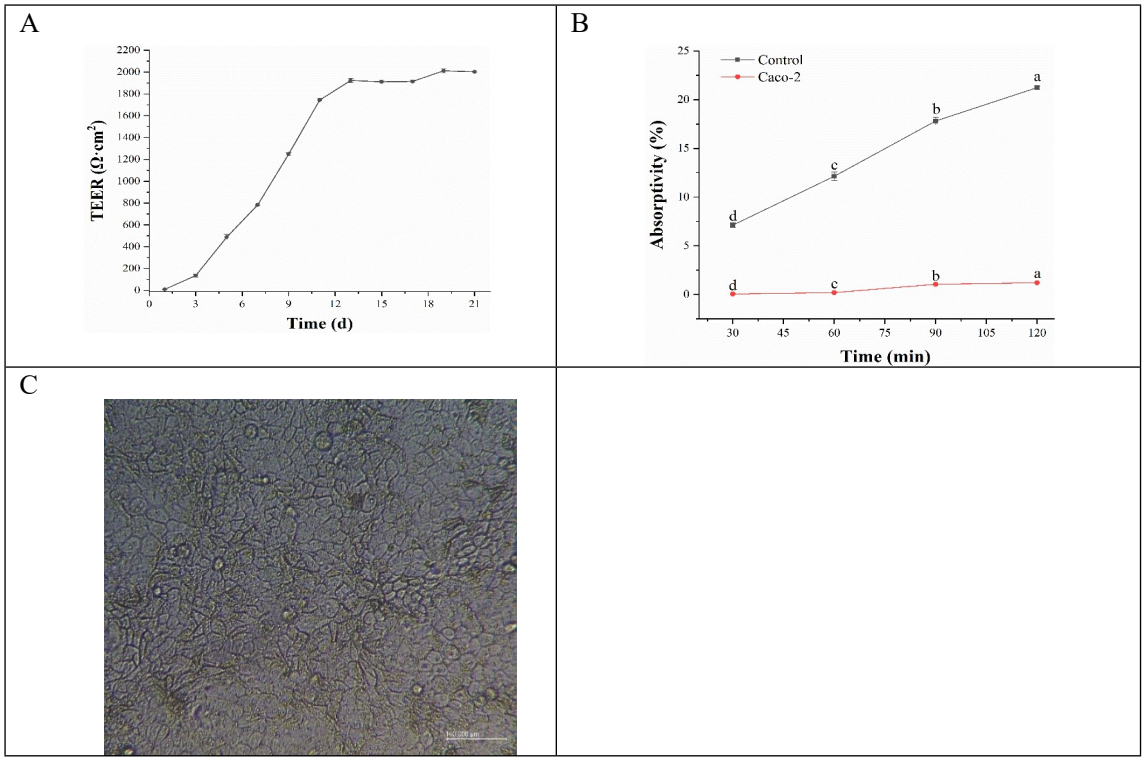
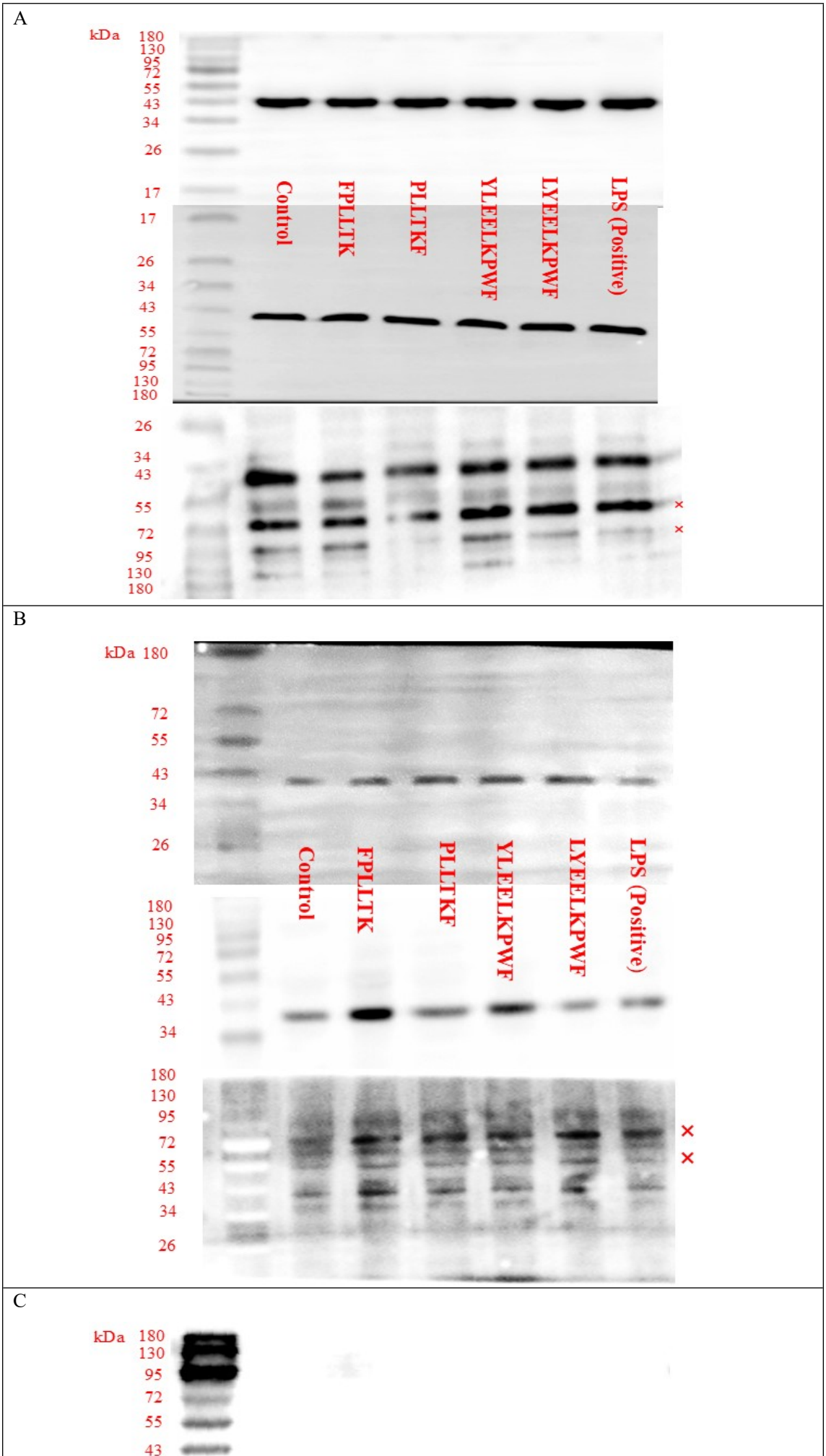


Fig. S1 The development Caco-2 monolayer. (A) Transmembrane resistance (TEER) (B) Permeation of sodium fluorescein through Caco-2 cell monolayer. (C) Morphology of Caco-2 cell monolayer after 21 days.


A
kDa
180
130
95
72
55
43
34
26
17
17
26
34
43
55
72
95
130
180
Control
FPLLTK
PLLTKF
YLEELKPWF
LYEELKPWF
LPS (Positive)
26
34
43
55
72
95
130
180
B
kDa 180
72
55
43
34
26
180
130
95
72
55
43
34
Control
FPLLTK
PLLTKF
YLEELKPWF
LYEELKPWF
LPS (Positive)
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130
95
72
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43
34
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C
kDa
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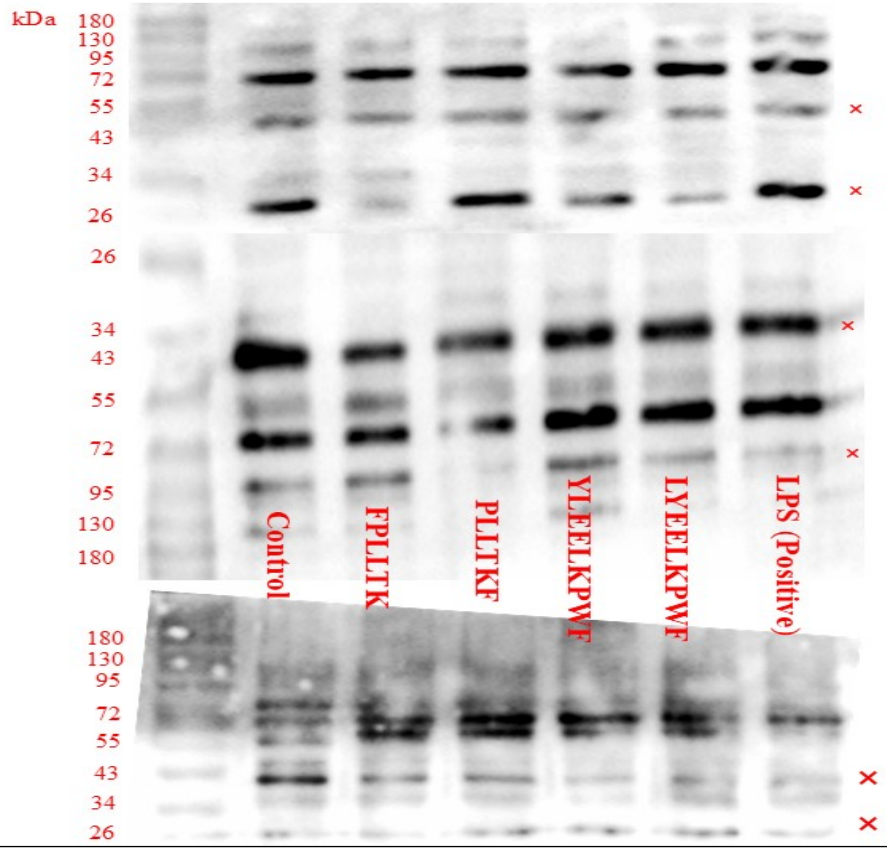
34

D


kDa
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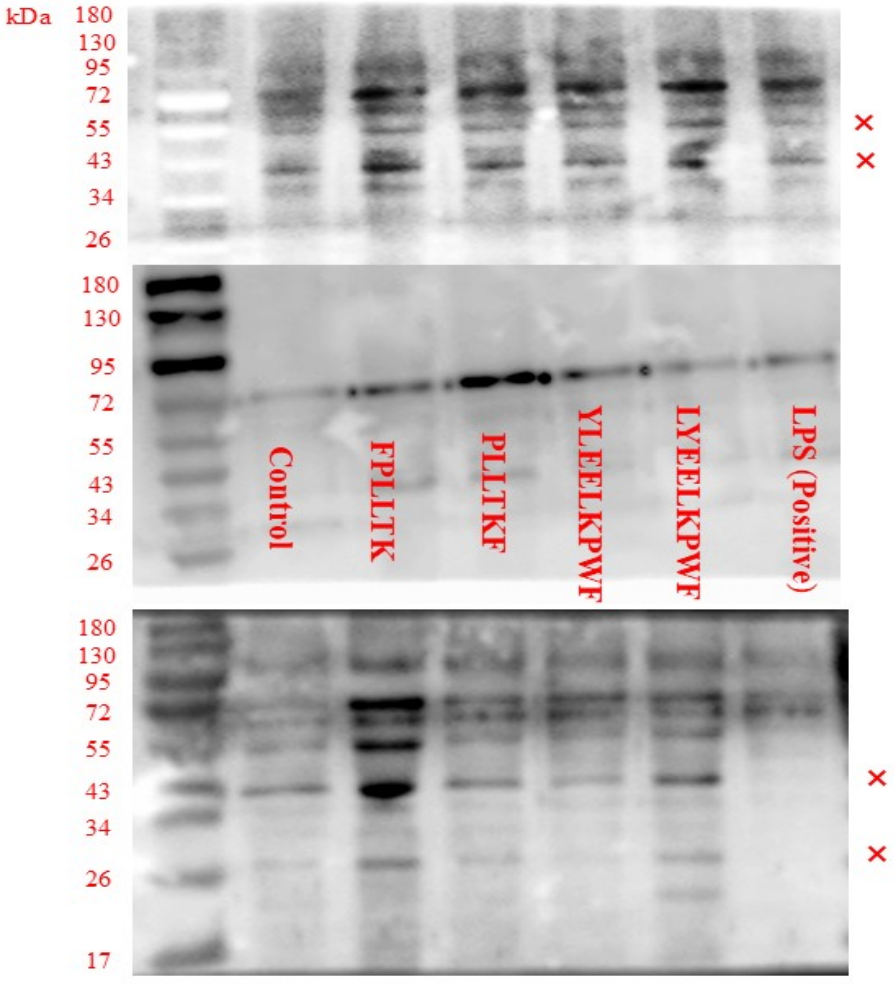
26
Control
FPLLTK
PLLTKF
YLEELKPWF
LYEELKPWF
LPS (Positive)

E


kDa
180
130
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72
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26
17
Control
FPLLTK
PLLTKF
YLEELKPWF
LYEELKPWF
LPS (Positive)

Fig. S2 The western blotting picture of protein with Marker. (A) β-actin, (B) IκB, (C) p-IκB, (D) p65, (E) p-p65.