Exopolysaccharides from *Lactobacillus plantarum* NCU116 induce c-Jun dependent Fas/Fasl-mediated apoptosis via TLR2 in mouse intestinal epithelial cancer cells

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Supplementary Table S1. The primer sequences for qRT-PCR (5'→3').

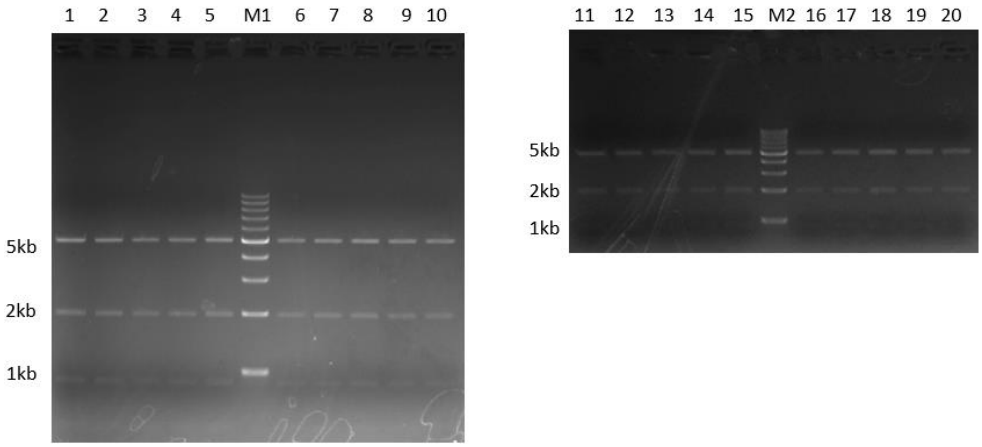
Acin1 forward	5'- CGAGATGACCCATCCTGAGG-3'
Acin1 reverse	5'-GGGGTGAATGTGTGCTGAG-3'
Apaf1 forward	5'- AGTGGCAAGGACACAGATGG -3'
Apaf1 reverse	5'- GGCTTCCGCAGCTAACACA -3'
APO-2L forward	5'-ATGGTGATTTGCATAGTGCTCC-3'
APO-2L reverse	5'-GCAAGCAGGGTCTGTTCAAGA-3'
Bax forward	5'-TGAAGACAGGGGCCTTTTTG-3'
Bax reverse	5'-AATTCGCCGGA GACACTCG-3'
Bcl2 forward	5'-ATG CCTTTGTGGAACTATATGGC-3'
Bcl2 reverse	5'-GGTATGCACCCAGAGTGATGC-3'
beta actin forward	5'-GGCTGTATTCCCCTCCATCG-3'
beta actin reverse	5'-CCAGTTGGTAACAATGCCATGT-3'
Cycs forward	5'- CCAAATCTCCACGGTCTGTTC -3'
Cycs reverse	5'- ATCAGGGTA TCCTCTCCCCAG -3'
c-Jun forward	5'- CCTTCTACGACGATGCCCTC -3'
c-Jun reverse	5'- GGTTCAAGGTCATGCTCTGTTT -3'
c-Fos forward	5'-CGGGTTTCAACGCCGACTA -3'
c-Fos reverse	5'- TTGGCACTAGAGACGGACAGA -3'
DR3 forward	5'-GTGTTGGGATTCGGCTTGGT-3'
DR3 reverse	5'-GTCCATGCACTTGTCGAGGTC-3'
DR5 forward	5'-CGGGCAGATCACTACACCC-3'
DR5 reverse	5'-TGTTACTGGAACAAAGACAGCC-3'
Fas forward	5'-TATCAAGGAGGCCCATTTTGC-3'
Fas reverse	5'-TGTTTCCACTTCTAAACCATGCT-3'
Fasl forward	5'-TCCGTGAGTTCACCAACCAAA-3'
Fasl reverse	5'-GGGGGTTCCCTGTTAAATGGG-3'
Gas2 forward	5'-CAGACATGAAGCTAATTTGCTGC -3'
Gas2 reverse	5'-GCAAGGCACCATTAT CCAACT-3'
lamin A forward	5'- GGATGCTGAGAACAGGCTACA -3'
lamin A reverse	5'- CTCTCGCTGCTTC CCGTTATC -3'
Parp1 forward	5'- GGCAGCCTGATGTTGAGGT -3'
Parp1 reverse	5'- GCGTACTCCGCTAAAAAGTCAC -3'
Parp2 forward	5'- CACAGCTTGGTGACTTGTT CT -3'
Parp2 reverse	5'- ACTCAGGCTTCAAAGTTTCCTC -3'
Rock1 forward	5'-GACTGGGGACAGTTTTGAGAC-3'
Rock1 reverse	5'-GGGCATCCAATCCATCCAGC-3';
Tlr1 forward	5'- TGAG GGTCCTGATAATGTCCTAC -3'
Tlr1 reverse	5'- AGAGGTCCAAATGCTTGAGGC -3'
Tlr2 forward	5'- GCAAACGCT GTTCTGCTCAG -3'
Tlr2 reverse	5'-AGGCGTCTCCCTCTATTGTATT-3'
Tlr3 forward	5'-GTGAGATACAACGTAGCTGACTG-3'

Tlr3 reverse	5’-TCCTGCATCCAAGATAGCAAGT-3’
Tlr4 forward	5’-ATGGCATGGCTTACACCACC-3’
Tlr4 reverse	5’-GAGGCCAATTTTGTCTCCACA-3’
Tlr5 forward	5’-GCAGGATCATGGCATGTCAAC-3’
Tlr5 reverse	5’- ATCTGGGTGAGGTTACAGCCT-3’
Tlr6 forward	5’-TGAGCCAAGACAGAAAACCCA -3’
Tlr6 reverse	5’- GGGACATGAGTAAGGTTCCTGTT-3’
TNF-R1 forward	5’-CCGGGAGAAGAGGGA TAGCTT-3’
TNF-R1 reverse	5’-TCGGACAGTCACTCACCAAGT-3’
TNF-R2 forward	5’-ACACCCTA CAAACCGGAACC-3’
TNF-R2 reverse	5’-AGCCTTCCTGTCATAGTATTCCT-3’
Human c-Jun forward	5’- AACAGGTGGCACAGCTTAAAC -3’
Human c-Jun reverse	5’- CAACTGCTGCGTTAGCATGAG -3’
Human Fas forward	5’- TCTGGTTCTTACGTCTGTTGC -3’
Human Fas reverse	5’- CTGTGCAGTCCCTAGCTTTCC -3’
Human Tlr2 forward	5’-ATCCTCCAATCAGGCTTCTCT-3’
Human Tlr2 reverse	5’-GGACAGGTCAAGGCTTTTTACA-3’

Supplementary Table S2. The primer sequences for TLRs shRNA (5’→3’).

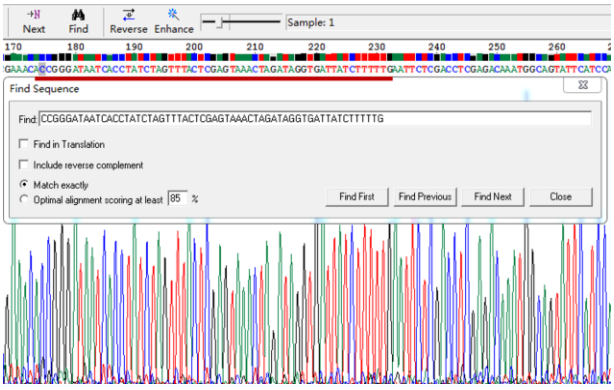
TLR2 forward 1	CCGGGATAATCACCTATCTAGTTTACTCGAGTAAACTAGATAGGTGATTATCTTTTTG
TLR2 reverse 1	AATTCAAAAAGATAATCACCTATCTAGTTTACTCGAGTAAACTAGATAGGTGATTATC
TLR2 forward 2	CCGGGCAGTCTTGAACATTTGGATTCTCGAGAATCCAAATGTTCAAGACTGCTTTTTG
TLR2 reverse 2	AATTCAAAAAGCAGTCTTGAACATTTGGATTCTCGAGAATCCAAATGTTCAAGACTGC
TLR1 forward 1	CCGGCCGTCCCAAGTTAGCCCATTTCTCGAGAAATGGGCTAACTTGGGACGGTTTTTG
TLR1 reverse 1	AATTCAAAAACCGTCCCAAGTTAGCCCATTTCTCGAGAAATGGGCTAACTTGGGACGG
TLR1 forward 2	CCGGGCCTTCAGGATGTTCAATTATCTCGAGATAATTGAACATCCTGAAGGCTTTTTG
TLR1 reverse 2	AATTCAAAAAGCCTTCAGGATGTTCAATTATCTCGAGATAATTGAACATCCTGAAGGC
TLR6 forward 1	CCGGCCGGTGGAGTACCTCAATATTCTCGAGAATATTGAGGTACTCCACCGGTTTTTG
TLR6 reverse 1	AATTCAAAAACCGGTGGAGTACCTCAATATTCTCGAGAATATTGAGGTACTCCACCGG
TLR6 forward 2	CCGGAGGCGCTATACTCGGTGTTTGCTCGAGCAAACACCGAGTATAGCGCCTTTTTTG
TLR6 reverse 2	AATTCAAAAAAGGCGCTATACTCGGTGTTTGCTCGAGCAAACACCGAGTATAGCGCCT

Supplementary Fig. S1 shRNA recombinant plasmids were verified by digesting with restriction enzymes (EcoRI, NcoI). Lane 1, 2, 3: TLR2 shRNA1; Lane 4, 5, 6, 7: TLR2 shRNA2; Lane8, 9, 10: TLR1 shRNA1; Lane11, 12, 13: TLR1 shRNA2; Lane 14, 15, 16, 17: TLR6 shRNA1; Lane 18, 19, 20: TLR6 shRNA2; Lane M1, M2: 1kb ladder marker from Takara Bio (Dalian, China). A correct shRNA recombinant plasmid should have three fragments about 5kb, 2kb and 1kb.



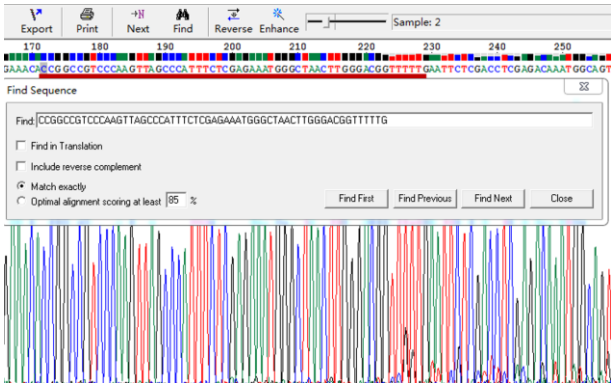
Supplementary Fig. S2 shRNA recombinant plasmids were verified by DNA sequencing. The insertions sequence was listed as follows and target sequence was indexed red line in the figure.

TLR2 shRNA: CCGGGATAATCACCTATCTAGTTTACTCGAGTAAACTAGATAGGTGATTATCTTTTTG;

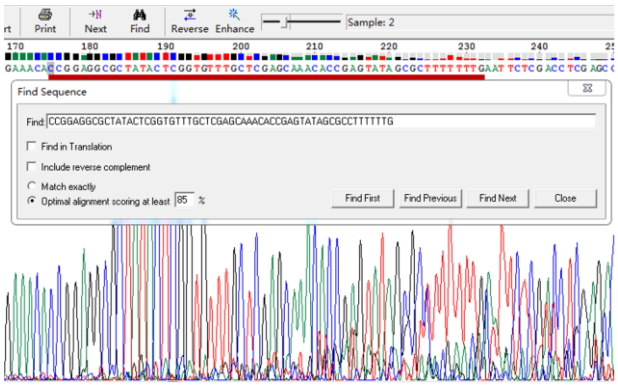


TLR2 shRNA: CCGGGCAGTCTTGAACATTTGGATTCTCGAGAATCCAAATGTTCAAGACTGCTTTTTG

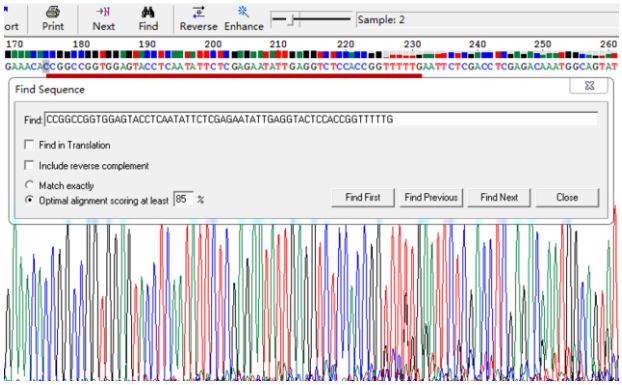
TLR1 shRNA: CCGGCCGTCCCAAGTTAGCCCATTTCTCGAGAAATGGGCTAACTTGGGACGGTTTTTG;



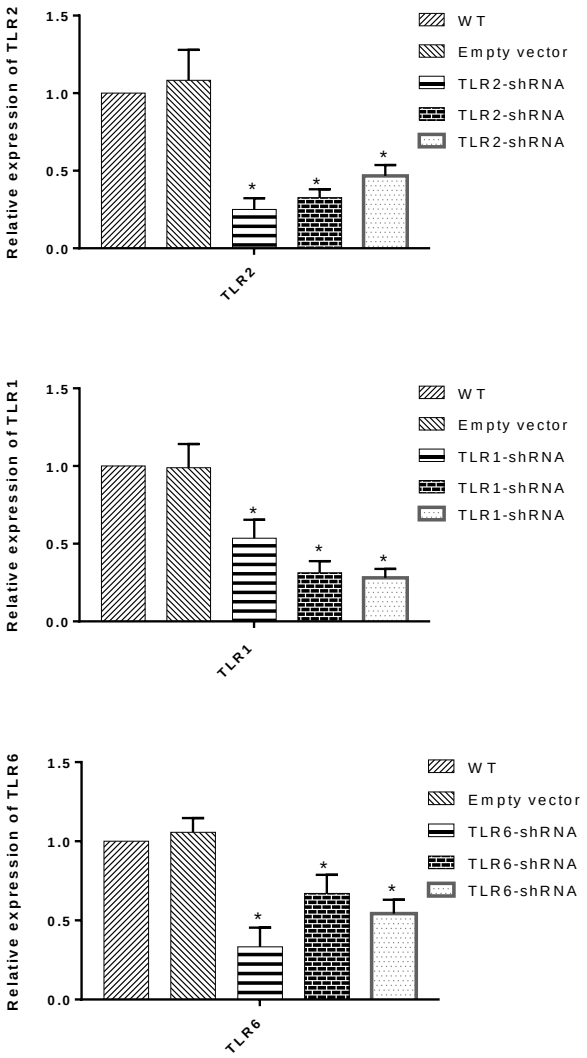
TLR6 shRNA: CCGGAGGCGCTATACTCGGTGTTTGCTCGAGCAAACACCGAGTATAGCGCCTTTTTTG.



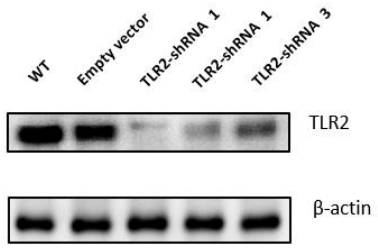
TLR6 shRNA: CCGGCCGGTGGAGTACCTCAATATTCTCGAGAATATTGAGGTACTCCACCGGTTTTTG



Supplementary Fig. S3 shRNA knockdown of TLR2, TLR1 and TLR6 in CT26 verified by RT-qPCR.



Supplementary Fig. S4 shRNA knockdown of TLR2 in CT26 verified by Western blot;



Western-Blots data for Figure 3 to 7

Figure 3C

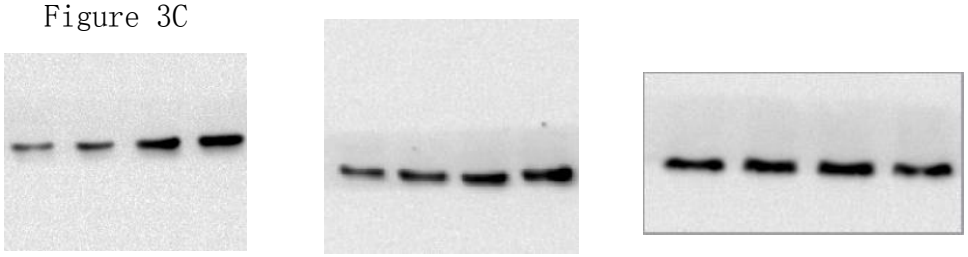


Figure 4A

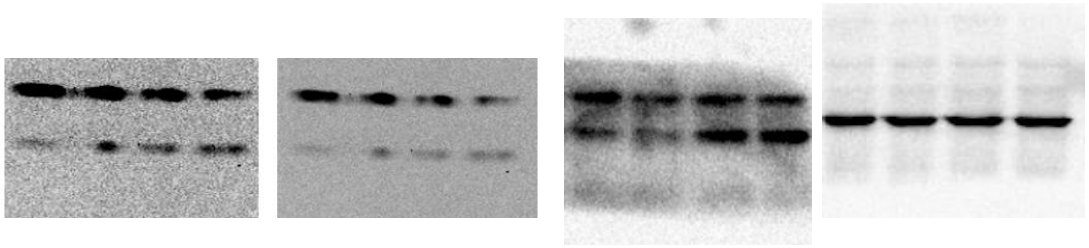


Figure 5B

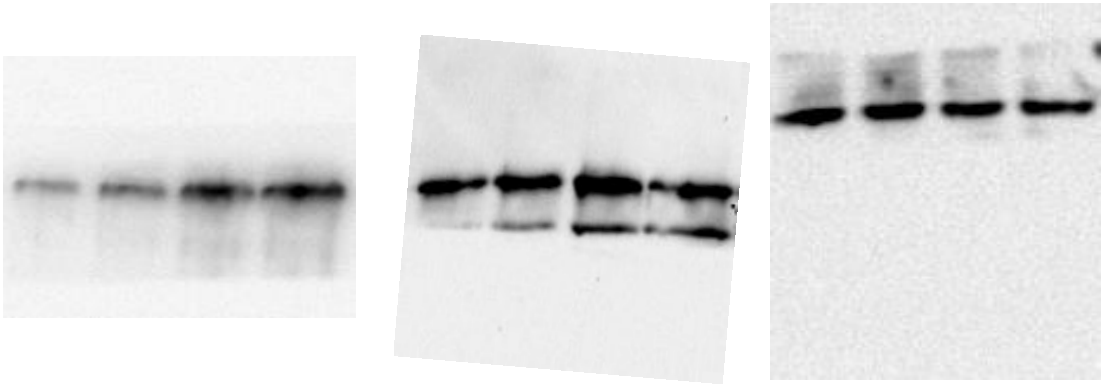


Figure 6B

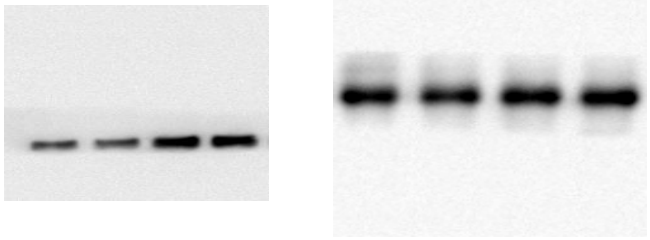


Figure 6C

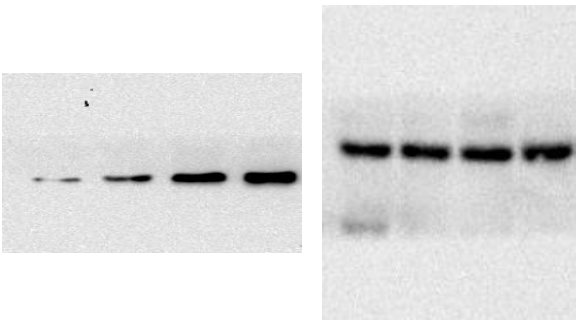


Figure 7B