Supplementary material

**Structural analysis and immunomodulatory activity of a novel homopolysaccharide isolated from *Parabacteroides distasonis***

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Fig. S1. The IR spectrum of PEP-1A after methylation.



Fig. S2. GC-MS total ion chromatogram of PEP-1A (A). Mass spectrum of 2,3,4,6-Me4-Manp (B).



Fig. S3. Mass spectrum of 3,4,6-Me3-Manp (A) and 2,4,6-Me3-Manp (B).



Fig. S4. Mass spectrum of 2,3,4-Me3-Manp (A) and 3,6-Me2-Manp (B).



Fig. S5. Mass spectrum of 2,4-Me2-Manp (A) and 3-Me1-Manp (B).

Table S1.

The sequences of primers used in this study

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| Primer |  | Sequence (5’→3’) |
| GAPDH | Forward | GTGTTCCTACCCCCAATGTGT |
| Reverse | ATTGTCATACCAGGAAATGAGCTT |
| IL-1β | Forward | CTTCAGGCAGGCAGTATCACTC |
| Reverse | TGCAGTTGTCTAATGGGAACGT |
| IL-6 | Forward | CCTACCCCAATTTCCAATGCTC |
| Reverse | GGTCTTGGTCCTTAGCCACTC |
| iNOS | Forward | CGGCAAACATGACTTCAGGC |
| Reverse | GCACATCAAAGCGGCCATAG |
| TNF-α | Forward | GATCGGTCCCCAAAGGGATG |
| Reverse | GTGGTTTGTGAGTGTGAGGGT |