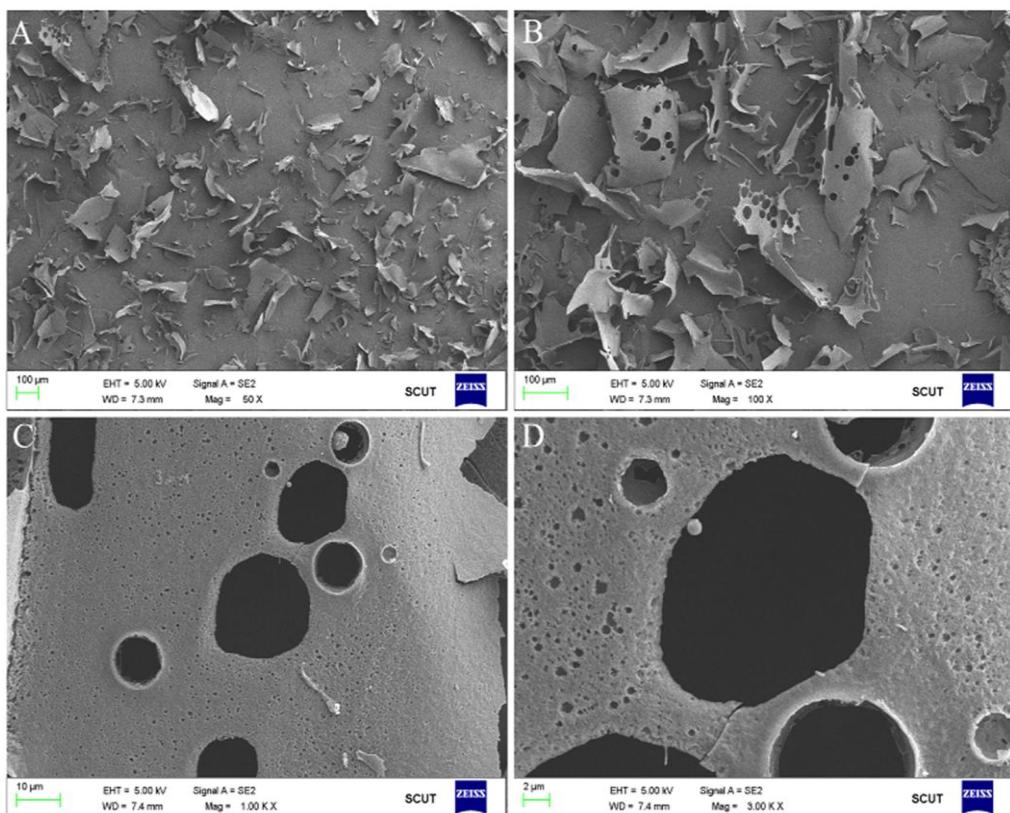


**Figure S1.** Gram staining results (**a**) and phylogenetic tree (**b**) of *Bifidobacterium longum* subsp. *longum* XZ01.



**Figure S2.** SEM images of S-EPS-1. A. 50 ×; B. 100 ×; C. 1000 ×; D. 3000 ×.

**Table S1.** PCR primer sequences.

Primer name		Sequence (5'→3')
GAPDH	Forward	GTGTTCCCTACCCCCAATGTGT
	Reverse	ATTGTCATAACCAGGAAATGAGCTT
IL-1 $\beta$	Forward	CTTCAGGCAGGCAGTATCACTC
	Reverse	TGCAGTTGTCTAATGGGAACGT
IL-6	Forward	CCTACCCAATTCCAATGCTC
	Reverse	GGTCTTGGTCCTAGCCACTC
TNF- $\alpha$	Forward	GATCGGTCCCCAAAGGGATG
	Reverse	GTGGTTGTGAGTGTGAGGGT