Supplementary files

Marine bacterial exopolysaccharide EPS11 inhibits migration and invasion of liver cancer cells by directly targeting collagen I

Ge Liu[1, 2, 4], Rui Liu[1, 2, 4], Yeqi Shan[1, 2, 3, 4], Chaomin Sun[1, 2, 3, 4*]

[1]CAS and Shandong Province Key Laboratory of Experimental Marine Biology & Center of Deep Sea Research, Institute of Oceanology, Chinese Academy of Sciences, Qingdao, China

[2]Laboratory for Marine Biology and Biotechnology, Qingdao National Laboratory for Marine Science and Technology, Qingdao, 266071, China

[3]College of Earth Science, University of Chinese Academy of Sciences, Beijing, 100049, China

[4]Center of Ocean Mega-Science, Chinese Academy of Sciences, 266071, Qingdao, China

[*]Corresponding author

Chaomin Sun Tel.: +86 532 82898857; fax: +86 532 82898648.

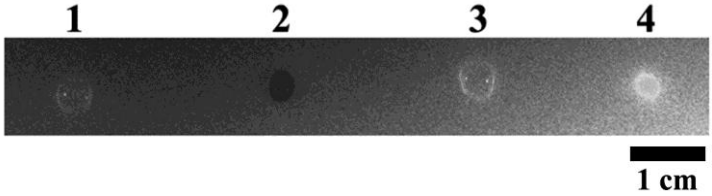
E-mail address: sunchaomin@qdio.ac.cn

Supplementary methods

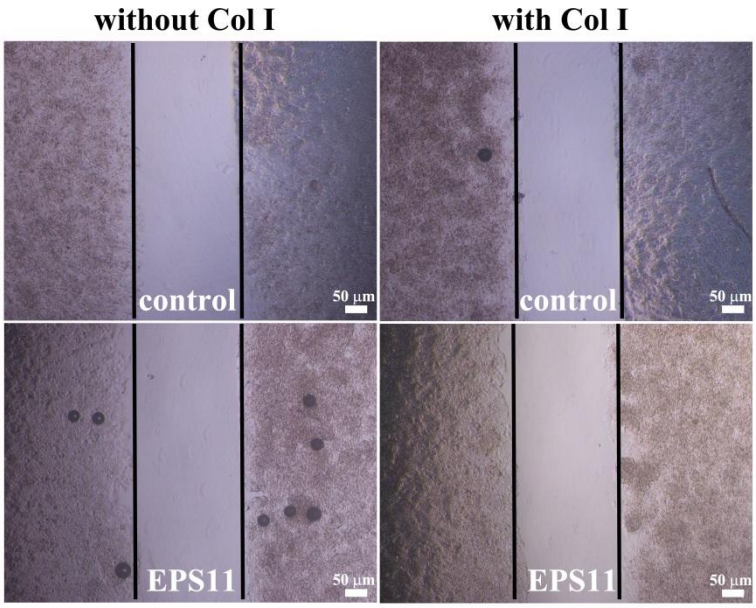
EPS11/membrane floatation assay

10 dishes of Huh7.5 cells treated with EPS11-FITC were collected, and then lysed with 200 passages in a tight-fitting dounce homogenizer. When cells are over 90% lysed, the cell lysate is spun at 2,500 *g* for 10 min at 4 ℃ to pellet cellular debris and nuclei. Transfer the supernatant (referred to as crude lysates, fraction 1) to a fresh tube and then is centrifuged at 20,000 *g* for 15 min at 4 ℃ to pellet cellular mitochondria (fraction 2). Collect the supernatant to a fresh tube and then is spun at 10,000 *g* for 60 min at 4 ℃ to pellet the membranes (fraction 3). The green fluorescence signals under the 488 nm excitation light of fractions 1, 2 and 3 were finally analyzed using the automatic chemical analyzer (Tanon, 5200F, China).

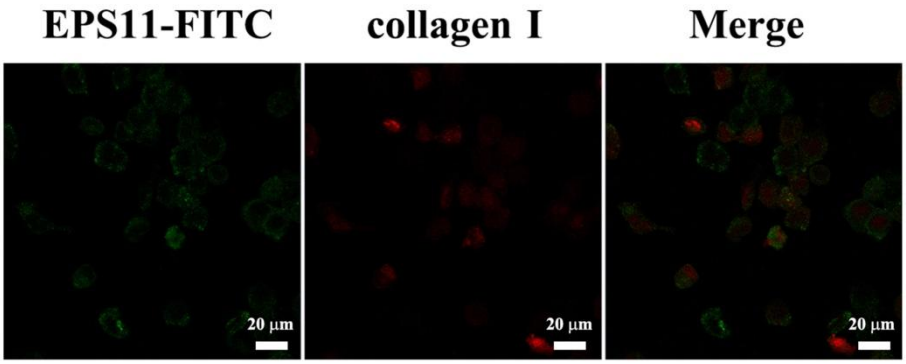
Supplementary results



Supplementary Figure 1. Analysis of co-location between EPS11 and membranes by EPS11/membrane floatation assay. Lane 1, fraction 1,crude lysates; Lane 2, fraction 2, cellular mitochondria; Lane 3, fraction 3, membranes; Lane 4, EPS11-FITC.



Supplementary Figure 2. The initial wounds when time is zero.



Supplementary Figure 3. Co-localization of EPS11 and collagen I in Huh7.5 cells using confocal laser scanning microscopy after cells were treated with 0.1 mg/mL EPS11 for 6 h.