



Supplementary Materials

Anti-Inflammatory and Antinociceptive Effects of Ethyl Acetate Fraction of an Edible Red Macroalgae *Sarcodia ceylanica*

Chieh-Chih Shih ^{1,2,†}, Hwong-Ru Hwang ^{3,4,†}, Chi-I Chang ⁵, Huei-Meei Su ⁶, Pei-Chin Chen ⁷, Hsiao-Mei Kuo ⁸, Pei-Jyuan Li ⁹, Hui-Min David Wang ^{10,11}, Kuan-Hao Tsui ^{12,13,14}, Yu-Chi Lin ¹⁵, Shi-Ying Huang ^{11,16,17,*} and Zhi-Hong Wen ^{7,9,*}

¹ Department of Marine Biotechnology and Resources, National Sun Yat-sen University, Kaohsiung 80424, Taiwan; shih.chiehchih@gmail.com

² Department of Marketing and Distribution Management, Fortune Institute of Technology, Kaohsiung 83158, Taiwan

³ Division of Cardiology, Department of Internal Medicine, Pingtung Christian Hospital, Pingtung 90059, Taiwan; hwang.lin@msa.hinet.net

⁴ Division of cardiology, department of internal medicine, Kaohsiung Veterans General Hospital, Kaohsiung 81362, Taiwan

⁵ Department of Biological Science and Technology, National Pingtung University of Science and Technology, Pingtung 91201, Taiwan; changchii@mail.npust.edu.tw

⁶ Tungkang Biotechnology Research Center, Fisheries Research Institute, Council of Agriculture, Pingtung 92845, Taiwan; healthalgae@gmail.com

⁷ Doctoral Degree Program in Marine Biotechnology, National Sun Yat-sen University and Academia Sinica, Kaohsiung 80424, Taiwan; peichin1128@gmail.com

⁸ Center for Neuroscience, National Sun Yat-sen University, Kaohsiung 80424, Taiwan; hsiaomeikuo@gmail.com

⁹ Marine Biomedical Laboratory and Center for Translational Biopharmaceuticals, Department of Marine Biotechnology and Resources, National Sun Yat-sen University, Kaohsiung 80424, Taiwan; pecha.pipi@gmail.com

¹⁰ Graduate Institute of Biomedical Engineering, National Chung Hsing University, Taichung 40227, Taiwan; davidw@dragon.nchu.edu.tw

¹¹ College of Oceanology and Food Science, Quanzhou Normal University, Quanzhou 362000, China

¹² Department of Obstetrics and Gynecology, Kaohsiung Veterans General Hospital, Kaohsiung 81362, Taiwan; khtsui60@gmail.com

¹³ Department of Obstetrics and Gynecology and Institute of Clinical Medicine, National Yang-Ming University, Taipei 11221, Taiwan

¹⁴ Department of Pharmacy and Graduate Institute of Pharmaceutical Technology, Tajen University, Pingtung 90741, Taiwan

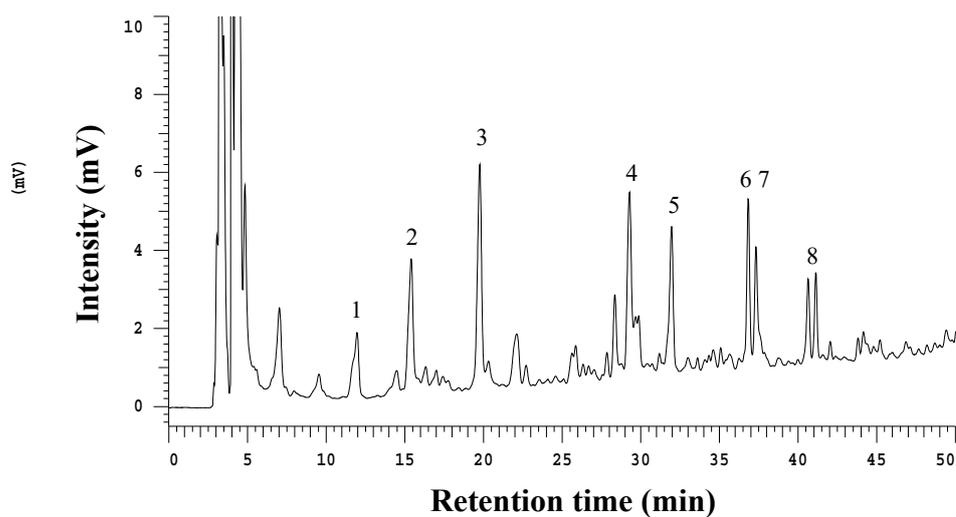
¹⁵ Division of Chinese Materia Medica Development, National Research Institute of Chinese Medicine, Taipei 112, Taiwan; m8952612@hotmail.com

¹⁶ Fujian Province key laboratory for the development of bioactive material from marine algae, Quanzhou 362000, China

¹⁷ Key Laboratory of Inshore Resources Biotechnology (Quanzhou Normal University) Fujian Province University, Quanzhou 362000, China

* Correspondence: johnjohnkings@163.com or johnjohnkings@gmail.com (S.-Y.H.); wzhang@mail.nsysu.edu.tw (Z.-H.W.); Tel.: +886-921253479 (S.-Y.H.); +886-7-5252021 (Z.-H.W.)

† These authors contributed equally to this work.



Supplementary Figure S1. HPLC profile of ethyl acetate fraction (PD1) of *Sarcodia ceylanica*. There were 8 major peaks from HPLC profile of PD1.

Supplementary Table S1. The UV absorption wavelengths of 8 peaks from HPLC profile of PD1.

Peak no.	t_R (min)	UV-vis λ_{max} (nm)
1	11.97	210, 254, 270
2	15.41	210, 256
3	19.77	211, 255, 281
4	29.29	220, 255, 289
5	31.95	222, 254, 275
6	36.83	220, 256
7	37.32	221, 254, 292
8	41.13	218, 255