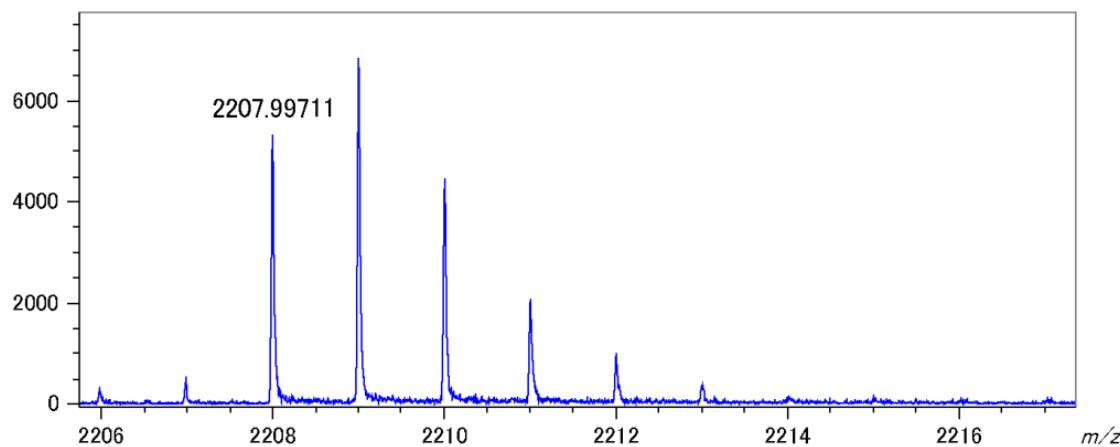
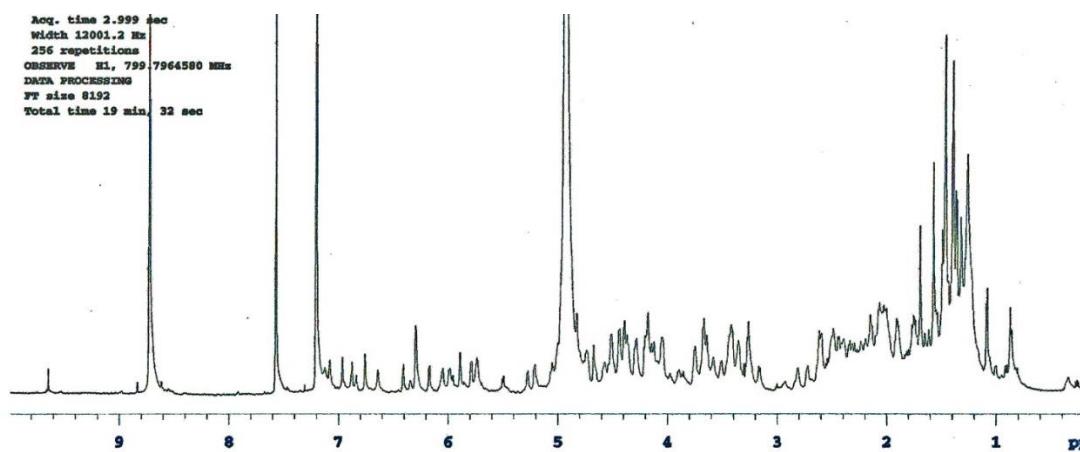


## Supplemental Material: Brevisulcenals-A1 and A2, Sulfate Esters of Brevisulcenals, Isolated from the Red Tide Dino-flagellate *Karenia brevisulcata*

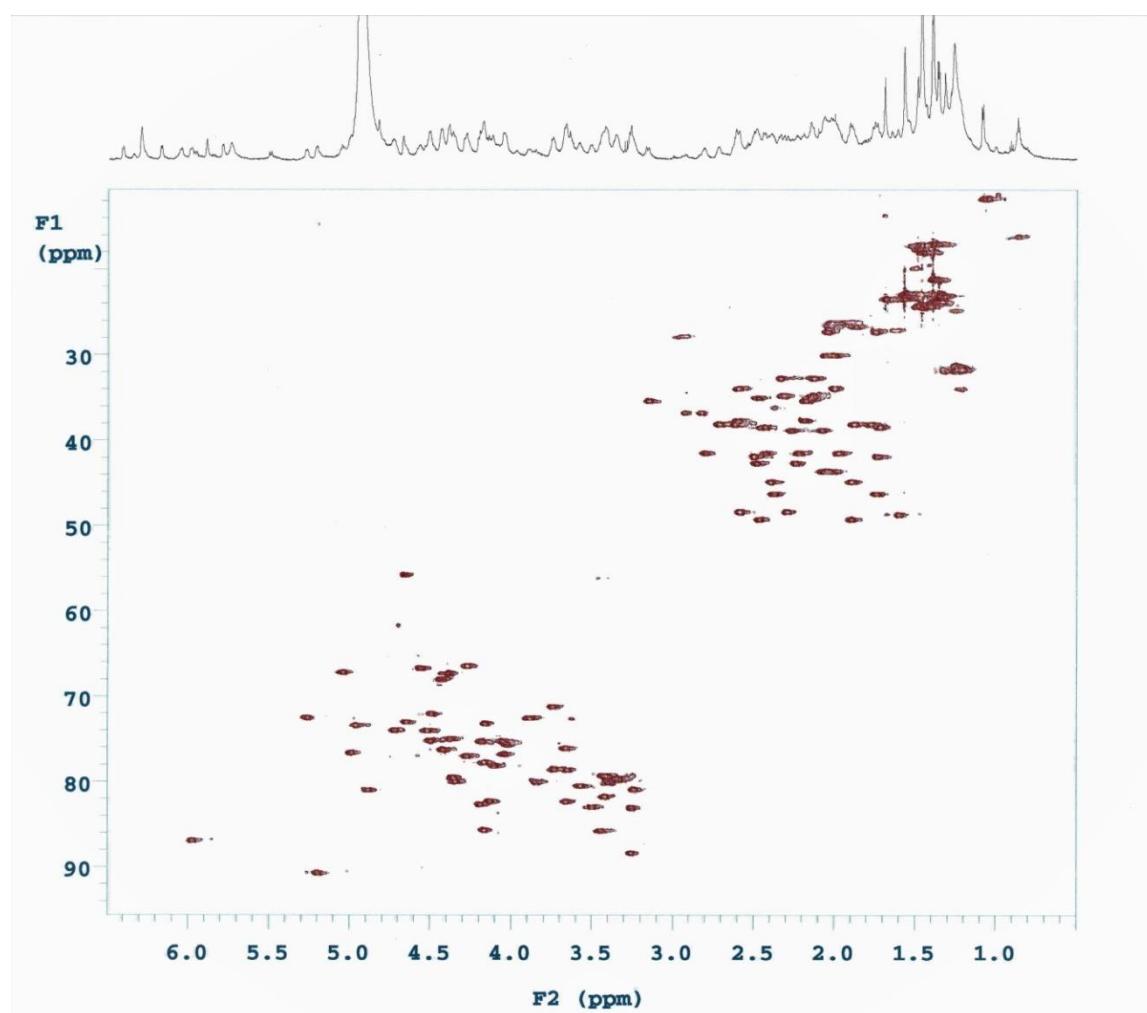
Masayuki Satake, Raku Irie, Patrick T. Holland, D Tim Harwood, Feng Shi, Yoshiyuki Itoh, Fumiaki Hayashi and Huiping Zhang



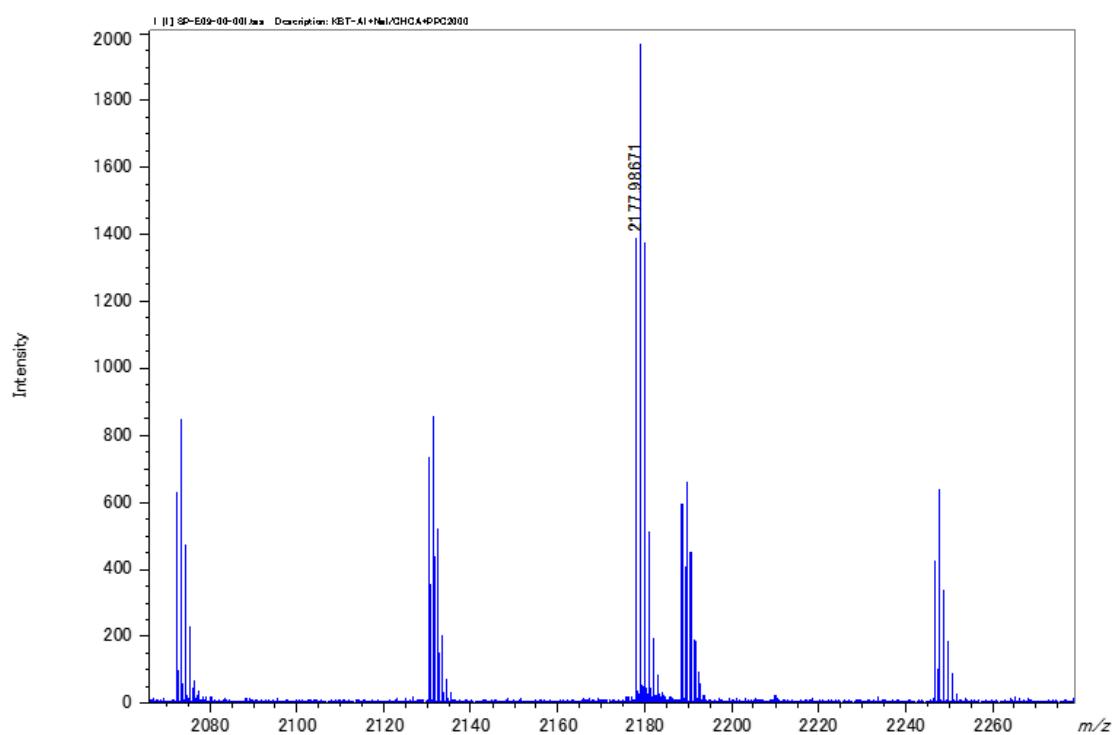
**Figure S1.** Spiral MALDI MS of KBT-A2.



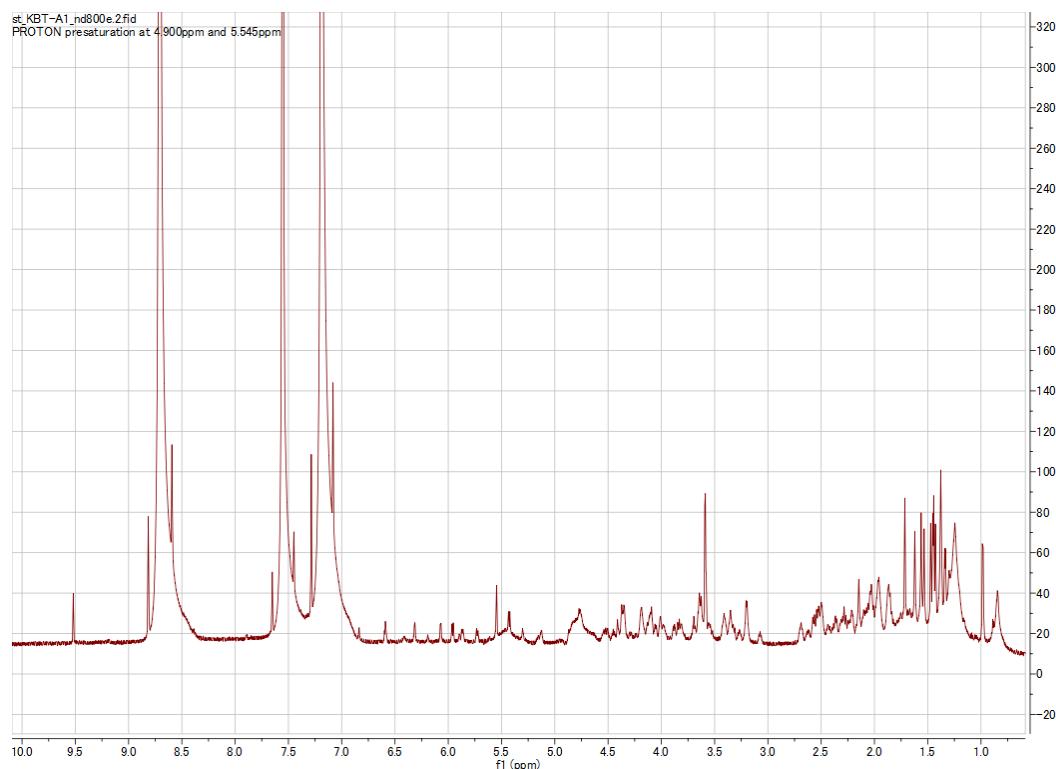
**Figure S2.**  $^1\text{H}$  NMR spectrum of KBT-A2 (800 MHz, pyridine- $d_5$ ).



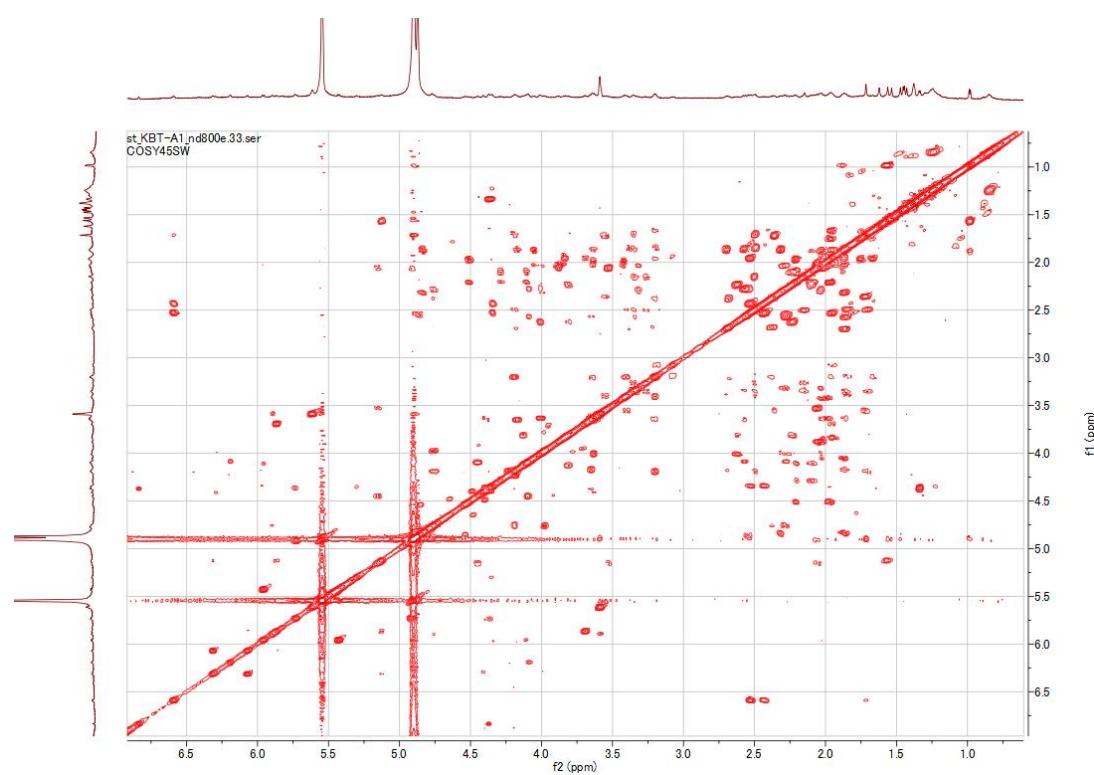
**Figure S3.** HSQC of KBT-A2 (800 MHz, pyridine-*d*<sub>5</sub>).



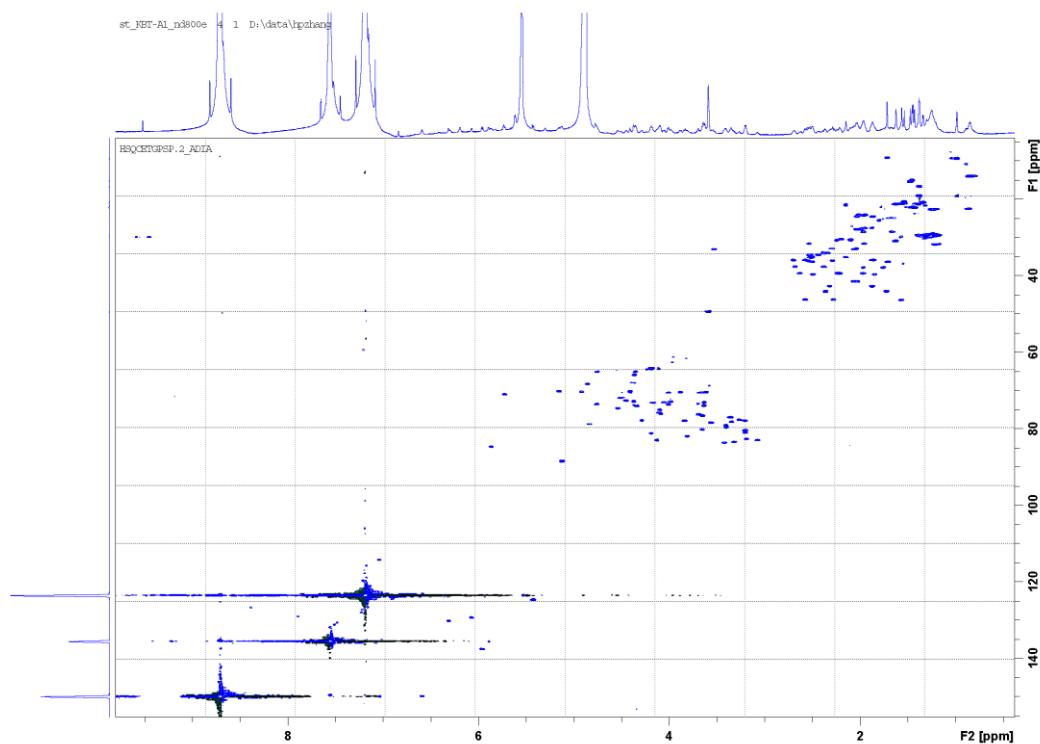
**Figure S4.** Spiral MALDI MS of KBT-A1.



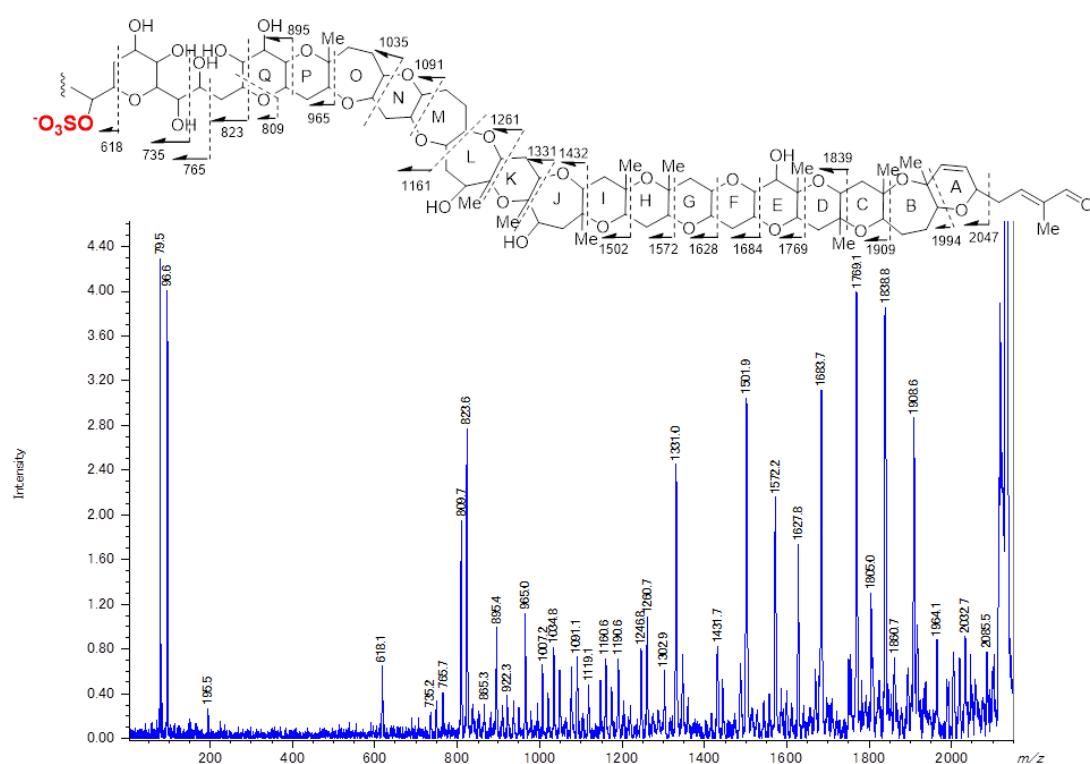
**Figure S5.**  $^1\text{H}$  NMR spectrum of KBT-A1 (800 MHz, pyridine- $d_5$ ).



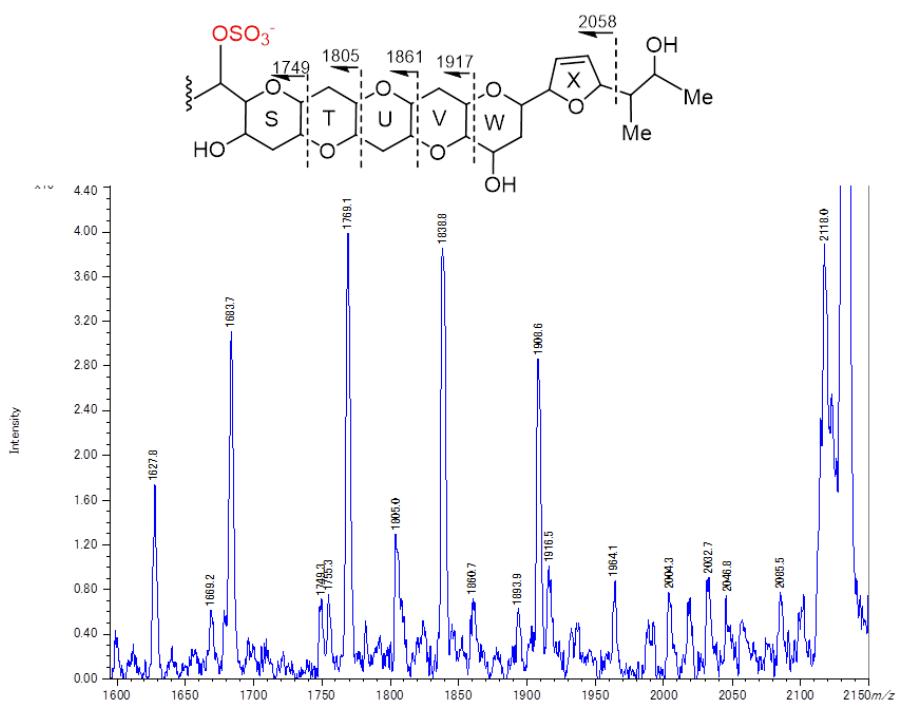
**Figure S6.** <sup>1</sup>H-<sup>1</sup>H COSY of KBT-A1 (800 MHz, pyridine-*d*<sub>5</sub>).



**Figure S7.** HSQC of KBT-A1 (800 MHz, pyridine-*d*<sub>5</sub>).



**Figure S8.** Spiral MLADI TOF-TOF of KBT-A1.



**Figure S9.** Spiral MALDI TOF-TOF of KBT-A1 ( $m/z$  1600–2150).