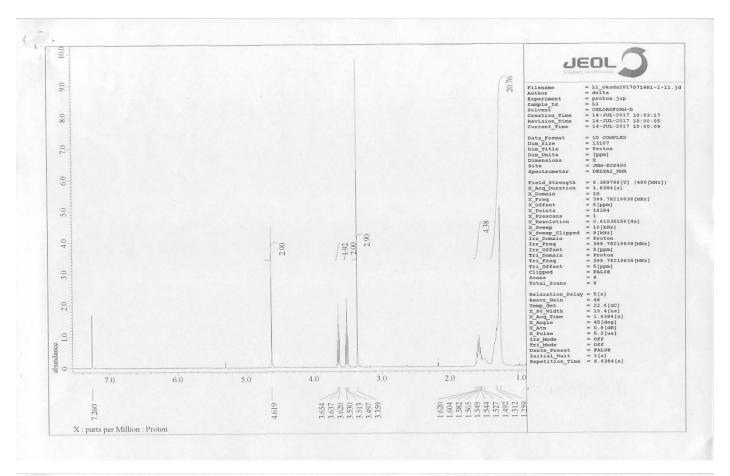
## **Supporting Information**

Identification and Total Synthesis of Two Previously Unreported Odd-Chain Bis-Methylene-Interrupted Fatty Acids with a Terminal Olefin that Activate Protein Phosphatase, Mg2+/Mn2+Dependent 1A (PPM1A) in Ovaries of the Limpet *Cellana toreuma* 

Hideki Kawashima, Naoki Toyooka, Takuya Okada, Huy Du Nguyen, Yuya Nishikawa, Yuka Miura, Nana Inoue, Motoko Ohnishi, and Ken-ichi Kimura

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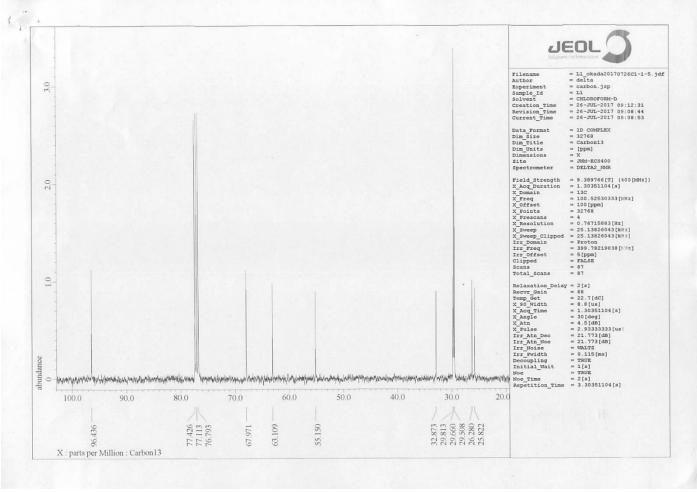
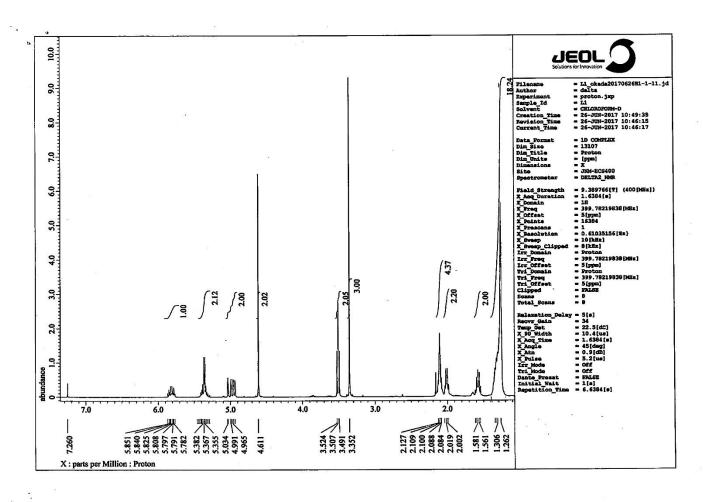


Figure S1 <sup>1</sup>H and <sup>13</sup>CMR spectra of 4b



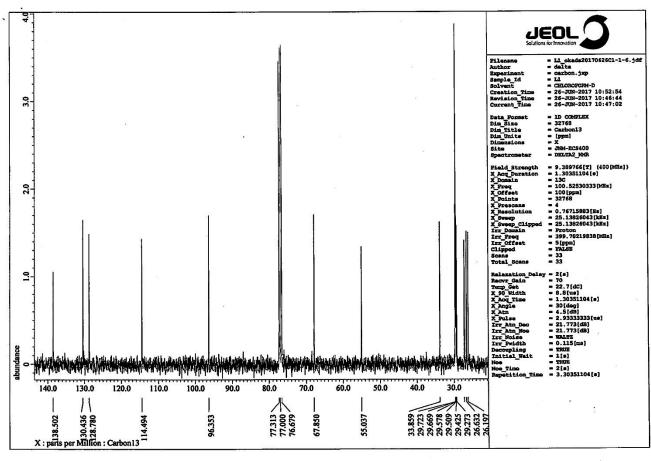


Figure S2 <sup>1</sup>H and <sup>13</sup>CMR spectra of 6a

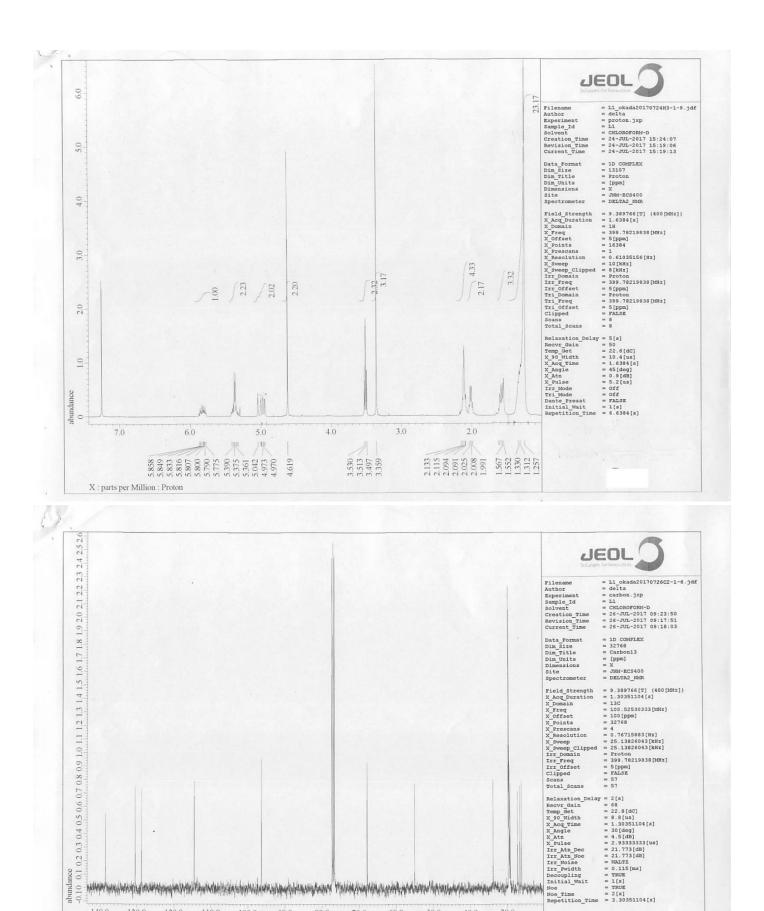


Figure S3 <sup>1</sup>H and <sup>13</sup>CMR spectra of 6b

THE PROPERTY OF THE PROPERTY O

80.0

77.321 77.000 76.679

70.0

67.865

60.0

55.052

40.0

30.0 1

33.867 29.738 29.639 29.540 29.295 26.205

90.0

140.0

130.0

85 65 65 85 X : parts per Million : Carbon13

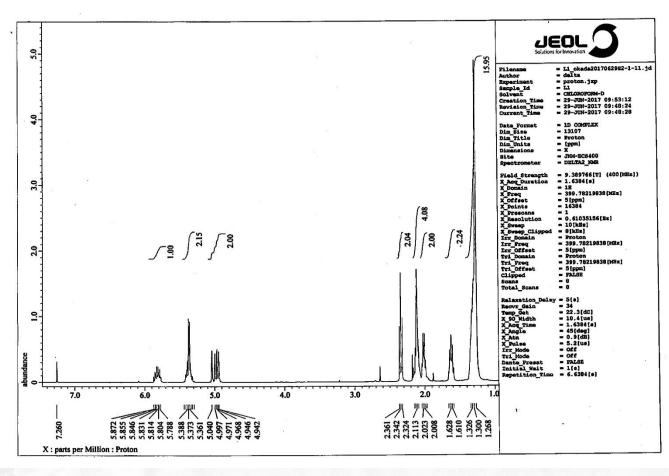
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110.0

114.501

100.0

96.361



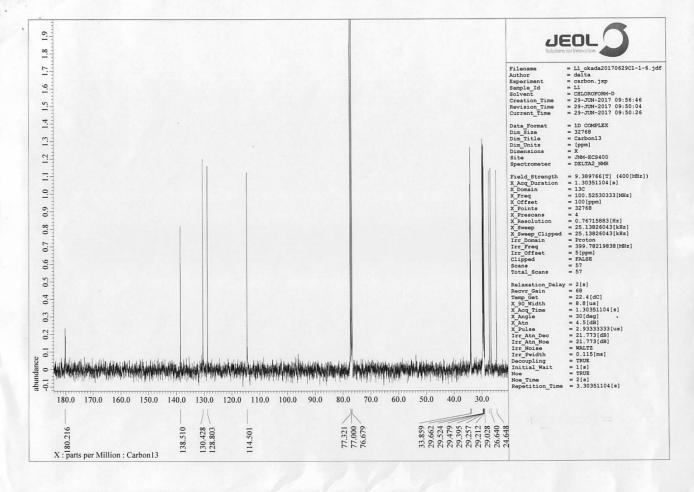
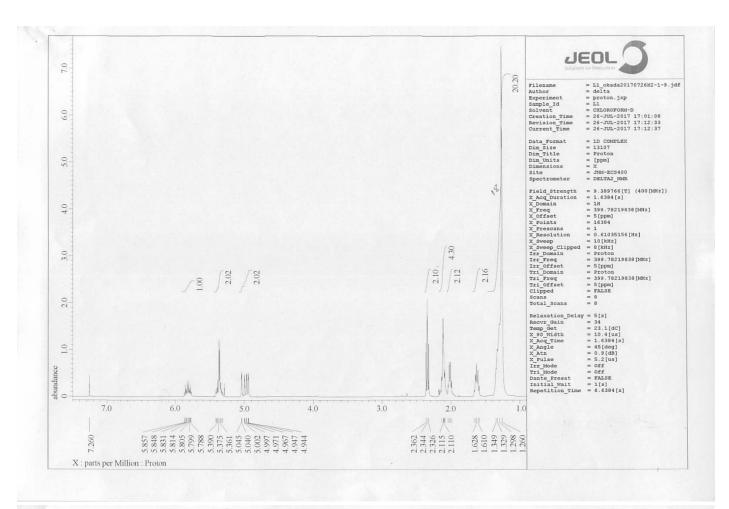


Figure S4 <sup>1</sup>H and <sup>13</sup>CMR spectra of synthesized compound 1



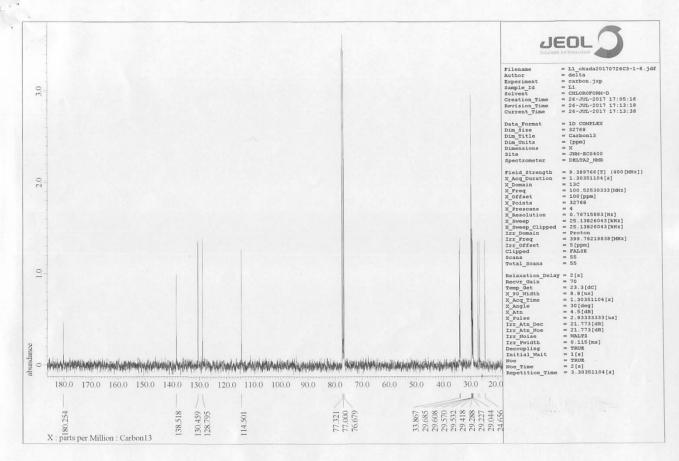


Figure S5 <sup>1</sup>H and <sup>13</sup>CMR spectra of synthesized compound 2