SUPPLEMENTARY MATERIAL

Rare acetogenins with anti-inflammatory effect from the red alga Laurencia obtusa

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Abstract

Three new rare C12 acetogenins en-ynes derivatives (1-3) were isolated from the organic extract obtained from the red alga Laurencia obtusa, collected from the Red Sea. The chemical structures of the isolated compounds were established by spectroscopical data analyses. Potent anti-inflammatory effect of the isolated metabolites was evidenced by inhibition of releasing the inflammatory mediators (e.g. TNF-α, IL-1β and IL-6) by employing Human Peripheral Blood Mononuclear Cells (PBMC).

Keywords: Anti-inflammatory; Laurencia obtusa; Acetogenins; Spectroscopy; Red Sea
Figure S1a: $^1$HNMR of compound 1
Figure S1b: $^1$HNMR of compound 1
Figure S1c: $^1$HNMR of compound 1
Figure S1d: $^1$HNMR of compound 1
Figure S1e: $^{13}$C NMR of compound 1
Figure S1f: $^{13}$CNMR of compound 1
Figure S1g: HSQC NMR of compound 1
Figure S1h: HSQC NMR of compound 1
Figure S1i: COSY NMR of compound 1
Figure S1j: COSY NMR of compound 1
Figure S1k: HMBC NMR of compound 1
Dr. Walied
Sample: NL-235-1 CDCl3

Figure S11: HMBC NMR of compound 1
Figure S1m: HMBC NMR of compound 1
Figure S1n: HMBC NMR of compound 1
Figure S10: NOESY NMR of compound 1
Figure S1p: NOESY NMR of compound 1
Figure S1q: NOESY NMR of compound 1
Figure S2a: $^1$H NMR of compound 2
Figure S2a: $^1$H NMR of compound 2
Figure S2b: $^1$H NMR of compound 2
Figure S2c: $^{13}$C NMR of compound 2
Figure S2d: COSY NMR of compound 2
Figure S2e: COSY NMR of compound 2

Sample: NL-229-2  CDCL3
Figure S2f: COSY NMR of compound 2
Figure S2g: HSQC NMR of compound 2
Figure S2h: HMBC NMR of compound 2
Figure S2i: HMBC NMR of compound 2
Figure S2j: HMBC NMR of compound 2
Figure S2k: HMBC NMR of compound 2
Figure S2l: HMBC NMR of compound 2
Figure S2l: NOSY NMR of compound 2
Figure S3a: $^1$H NMR of compound 3
Figure S3b: $^1$H NMR of compound 3
Figure S3c: $^1$H NMR of compound 3
Figure S3d: $^1$H NMR of compound 3
Figure S3e: $^{13}$C NMR of compound 3
Figure S3f: $^{13}$C NMR of compound 3
Figure S3g: $^{13}$C NMR of compound 3
Figure S3h: COSY NMR of compound 3
Figure S3i: COSY NMR of compound 3

Sample: NL-244-4  CDCl3
Figure S3j: COSY NMR of compound 3
Figure S3k: COSY NMR of compound 3
Figure S3l: COSY NMR of compound 3
Figure S3m: HSQC NMR of compound 3
Figure S3n: HSQC NMR of compound 3
Figure S3o: HMBC NMR of compound 3
Figure S3p: HMBC NMR of compound 3
Figure S3r: HMBC NMR of compound 3
Figure S3: NOSY NMR of compound 3.
Figure S3t: NOSY NMR of compound 3