Supporting Information for

Dragmacidoside; a new nucleoside from the Red Sea sponge *Dragmacidon coccinea*

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Chemical investigation of the Red Sea sponge *Dragmacidon coccinea* led to the isolation of a new nucleoside, dragmacidoside (**1**), along with eight known compounds: adenosine (**2**), inosine (**3**), deoxycytidine (**4**), methyl- α -D-glucopyranoside (**5**), clionasterol (**6**), stigmasterol (**7**), campesterol (**8**) and brassicasterol (**9**). The compounds were isolated from chloroform and ethyl acetate fractions of the methanolic extract of the sponge and their structures were established based on various spectroscopic data including MS, 1D and 2D NMR (COSY, HSQC and HMBC). Biological testing revealed that the chloroform fraction possess significant anti-inflammatory activity in the carrageenan induced-hind paw edema in rats.

Keywords: Red Sea sponges, *Dragmacidon coccinea*, dragmacidoside, nucleosides, steroids, anti-inflammatory activity

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¹H NMR Spectrum of 1 (CD₃OD)

¹³C NMR Spectrum of 1 (CD₃OD)

COSY Spectrum of 1 (CD₃OD)

Dr.Jihan Badr
Sample: Z-8 CD3OD
@COSY_NS2_KAAU MeOD {D:\outside} jaber 3

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NAME      Gihan Z-8  05-11-2013
EXPNO     12
PROCNO    1
Date_     20131105
Time      13.50
INSTRUM    spect
PROBHD     5 mm CPDCH 1JC
PULPROG    cosypppqi
TD         2048
SOLVENT    MeOD
NS          4
DS          4
SWH         6009.615 Hz
FIDRES     2.934382 Hz
AQ         0.1704436 sec
RG          203
DW          83.200 usec
DE          12.00 usec
TE          303.0 K
D0          0.0000300 sec
D1          0.47270080 sec
D11         0.03000000 sec
D12         0.00002000 sec
D13         0.00000400 sec
D16         0.00020000 sec
RG          0.00016640 sec

===== CHANNEL f1 =====
NUC1       1H
P0          9.90 usec
P1          9.90 usec
PL1        2500.00 usec
PL11       -0.70 dB
PL10        8.33 dB
PL1W       19.62554169 W
PL10W      2.45370102 W
SFO1       600.0828804 MHz

===== GRADIENT CHANNEL =====
GPRAM1     SINE.100
GFE1       10.00 %
P16        1000.00 usec
ND0         1
TD          512
SFO1       600.0829 MHz
FIDRES     11.737530 Hz
SW         10.015 ppm
FNAME      OF
SI          2048
SF         600.0800221 MHz
WDW         SINE
SSB         0
LB          0.00 Hz
GB          0
PC          1.40
SI         1024
MC2        OF
SF         600.0800221 MHz
WDW         SINE
SSB         0
LB          0.00 Hz
GB          0
  
```

HSQC Spectrum of 1 (CD₃OD)

HMBC Spectrum of 1 (CD₃OD)

Dr.Jihan Badr
Sample: Z-8 CD3OD
@HMBCgplp2nd_NS4_KAAU MeOD {D:\outside} jaber 3

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NAME      Gihan Z-8  05-11-2013
EXPNO     1
PROCNO    1
Date_     20131105
Time      14.18
INSTRUM    spect
PROBHD     5 mm CPDCH 13C
PULPROG    zgpg30
TD          4096
SOLVENT    H2O
NS          128
DS          4
SWH         6009.615 Hz
FIDRES     1.481193 Hz
AQ          0.3408372 sec
RG          203
DW          83.280 usec
DE          12.00 usec
TE          303.2 K
----- CHANNEL f1 -----
NUC1        13C
P1          9.30 usec
P2          19.80 usec
PL1         -0.70 dB
PL12        19.62554165 W
SFO1        600.0628054 MHz
----- CHANNEL f2 -----
NUC2        13C
P3          9.30 usec
P24         2000.00 usec
PL2         2.80 dB
PL12W       37.96579361 W
SFO2        150.9075884 MHz
SF02        11.05 dB
SFOANT      Ccp600comp.4
TECAL2      0.300
SFOFFS2     0.00 Hz
----- GRADIENT CHANNEL -----
GPMAX1      SINE.100
GPMAX3      SINE.100
GPMAX4      SINE.100
GPMAX5      SINE.100
GFE1        80.00 %
GFE2        15.00 %
GFE3        10.00 %
GFE4        -5.00 %
P16         1000.00 usec
ND0         2
SFO1        150.9075884 MHz
FIDRES     147.764005 Hz
SW          251.006 ppm
FMODE       Echo-Antiecho
SI          2348
SF          600.0800221 MHz
SINE
SFB         0
LB          0.00 Hz
PC          0
SI          256
MC2         echo-antiecho
SF          150.8902217 MHz
SFB         0
SINE
LB          0.00 Hz
GB          0

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