

**Table S1.**  $^1\text{H}$  and  $^{13}\text{C}$ -NMR data of compound 1.

POSITION	$^1\text{H}$	$^{13}\text{C}$
1		
2		156.9
3		134.60
4		178.14
5		161.7
6	6.19 (d, $J = 2.0$ Hz)	99.1
7		145.6
8	6.38 (d, $J = 2.0$ Hz)	94.02
9		
10		104.5
1'		121.50
2'	7.30 (d, $J = 2.0$ Hz)	116.04
,	-	145.6
4'	-	148.83
,	6.90 (d, $J = 8.0$ Hz)	115.85
6'	7.25 (dd, $J = 8.0, 2.0$ Hz)	121.11
1''		
2''	5.24 (d, $J = 1.5$ Hz)	102.22
3''	4.59 (dd, $J = 3.5, 1.5$ Hz)	70.44
4''	3.23 (m)	71.56
5''	3.50 (dd, $J = 9.5, 3.5$ Hz) 3.49 (m)	70.73 70.98
,,	0.807 (d, $J = 6.0$ Hz)	17.90

**Table S2.** Figure 6 Densitometry readings/intensity ratio.

pJNK				NFkB				TNF- $\alpha$			
C	Eth	Eth+F	F	C	Eth	Eth+F	F	C	Eth	Eth+F	F
1.05	3.7	2.7	2	1.05	4	2.6	1.6	1.05	1.6	1.1	1.2
0.95	3.6	2.5	2.1	0.95	3.9	2.5	1.5	0.95	1.7	1.2	1.25
1	3.8	2.4	1.9	1	4.1	2.7	1.7	1	1.5	1.15	1.1

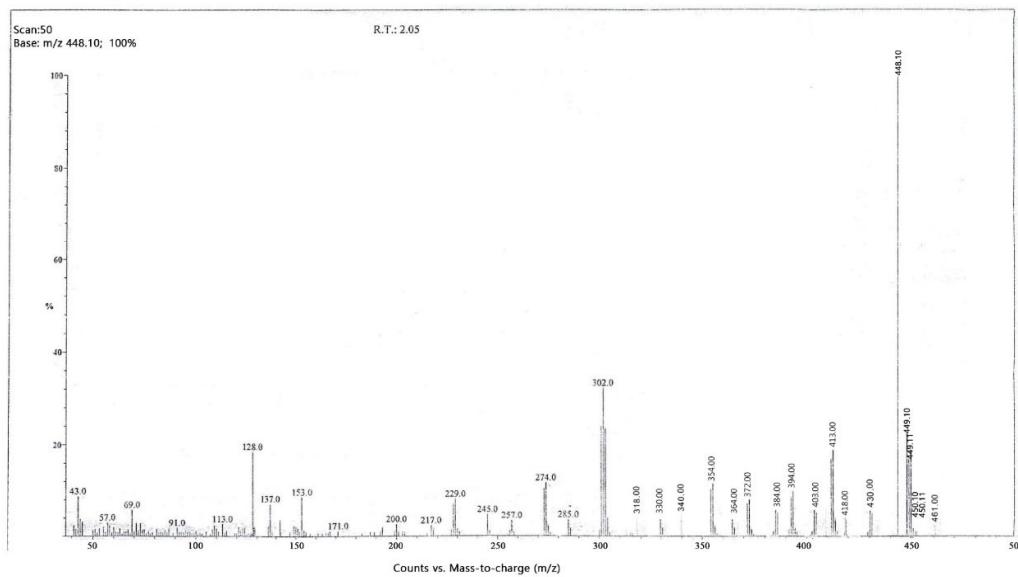
**Table S3.** Figure 7 Densitometry readings/intensity ratio.

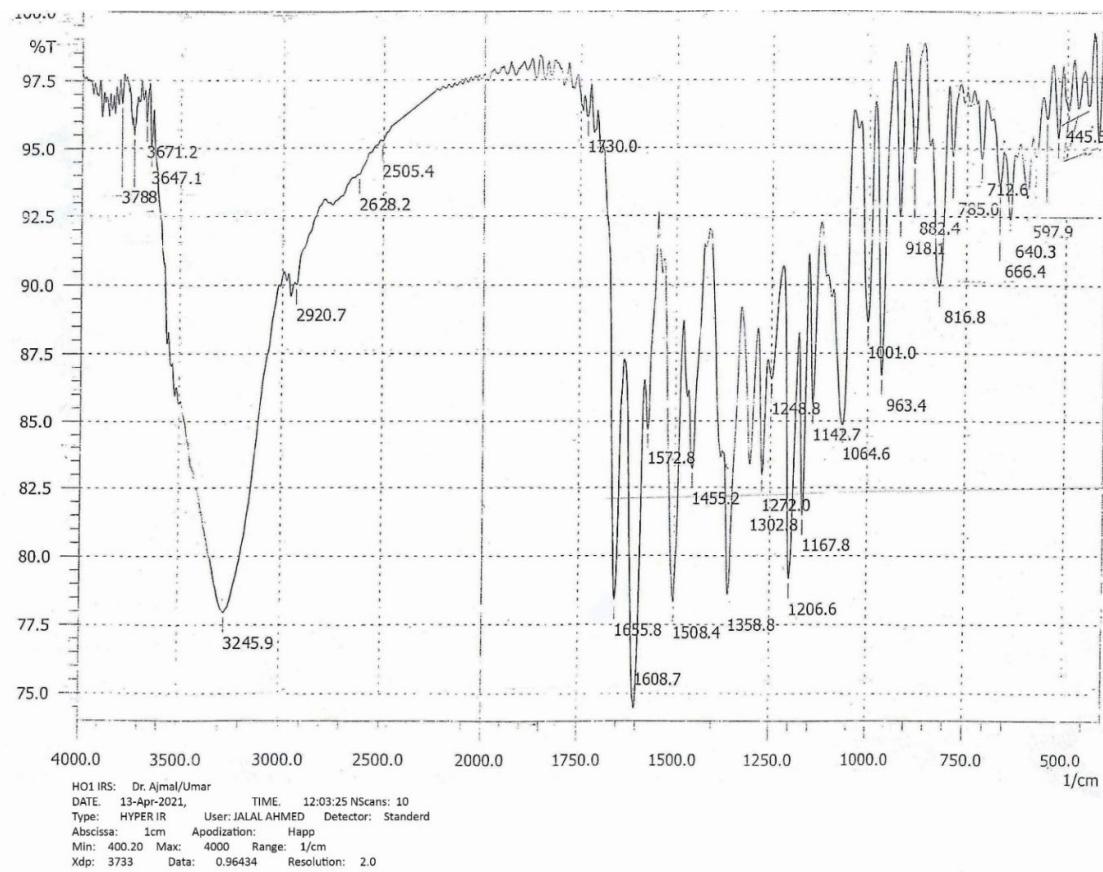
	C			Eth			Eth+F			F		
NLRP3	1	1.05	0.95	3.5	3.4	3.3	1.9	1.8	1.7	1.1	1.2	1.3
ASC	1	1.05	0.95	2.7	2.8	2.6	1.6	1.5	1.4	1.05	1.25	1.35
Caspase-1	1	1.05	0.95	3	2.9	2.8	1.1	1.2	1.3	1.6	1.5	1.7
IL-1 $\beta$	1	1.05	0.95	2.5	2.4	2.6	1.3	1.2	1.4	1.1	1.15	1.25

**Table S4.** Figure 8 Densitometry readings/intensity ratio.

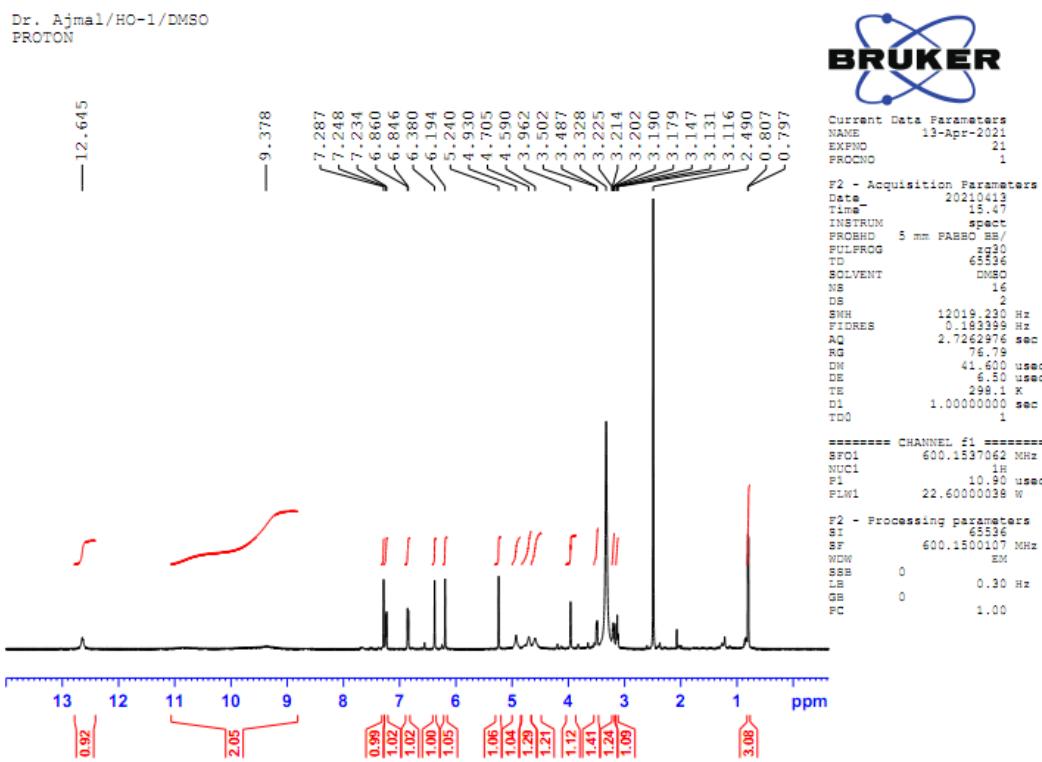
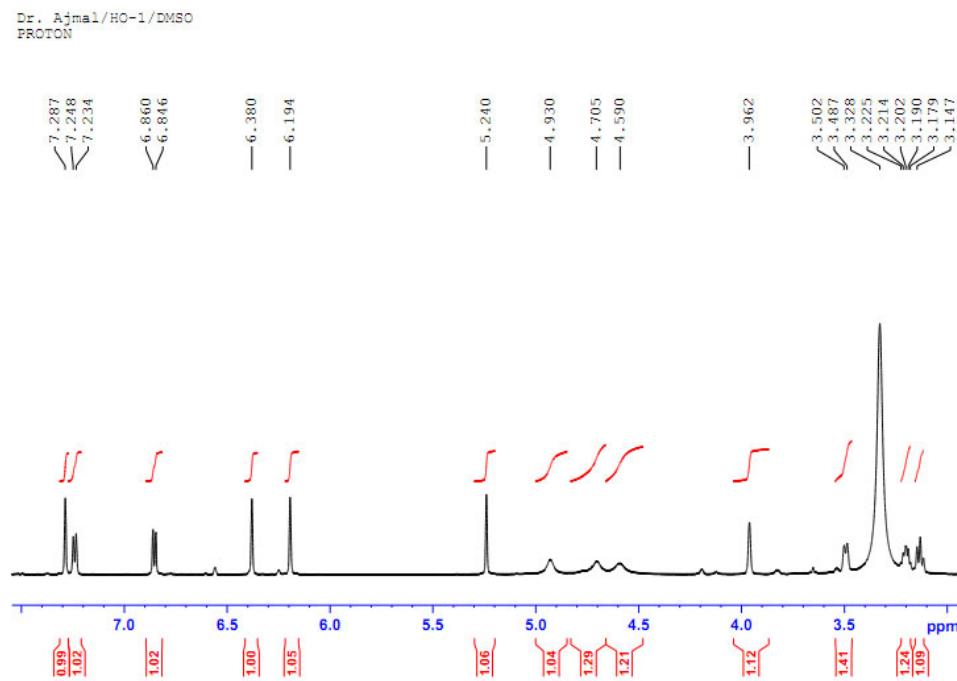
BCL-2				BAX			
C	Eth	Eth+F	F	C	Eth	Eth+F	F
1.05	0.5	1	0.9	1.05	2	1.4	1.2
0.95	0.6	0.8	0.85	0.95	2.1	1.2	1.25
1	0.4	0.7	0.75	1	2.2	1.3	1.1
C		Eth			Eth+F		F
1	1.05	0.95	3.5	3.4	3.3	1.9	1.8
1	1.05	0.95	2.1	2.2	2	0.9	1
BAX/BCL-2							
C	Eth	Eth+F	F				
1.05	2.5	2	1.7				
0.95	2.6	2.1	1.5				
<b>1</b>							

Sample Name	HOL-1	Position	Vial 41	Instrument Name	Instrument 1
User Name		Inj Vol	2	InjPosition	
Sample Type	Sample	IRM Calibration Status	Success	Data Filename	HOL-1.d
ACQ Method	POSITIVE ION METHOD MS.m	Comment		Acquired Time	03-May-21 1:17:34 PM

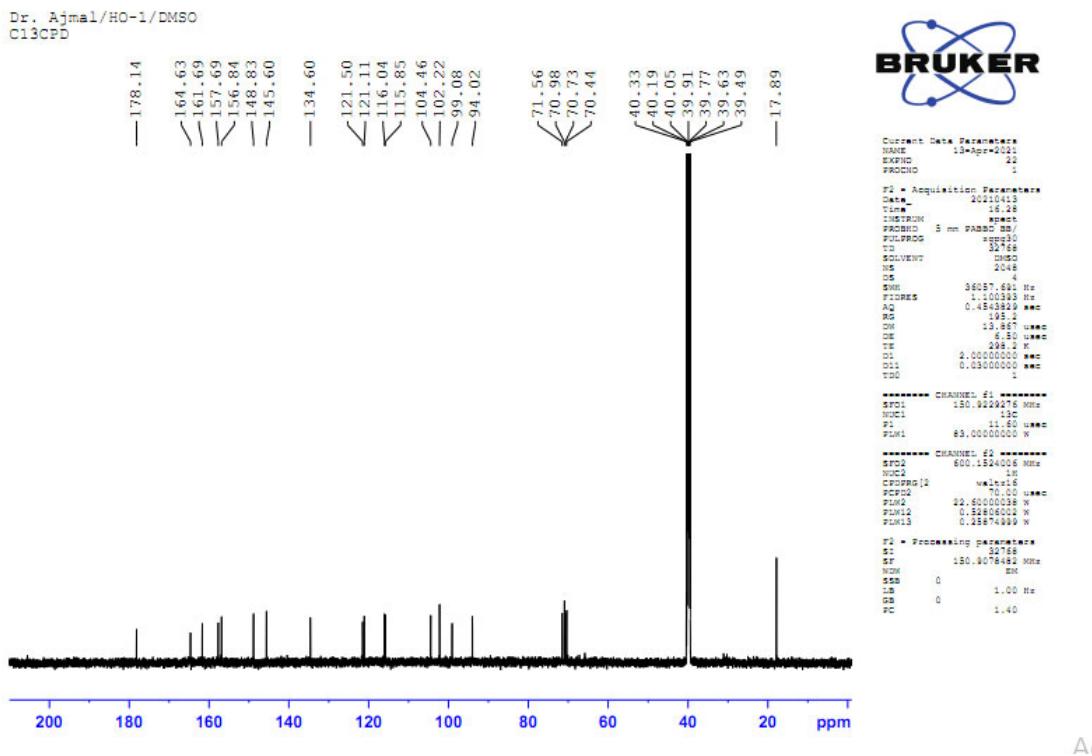
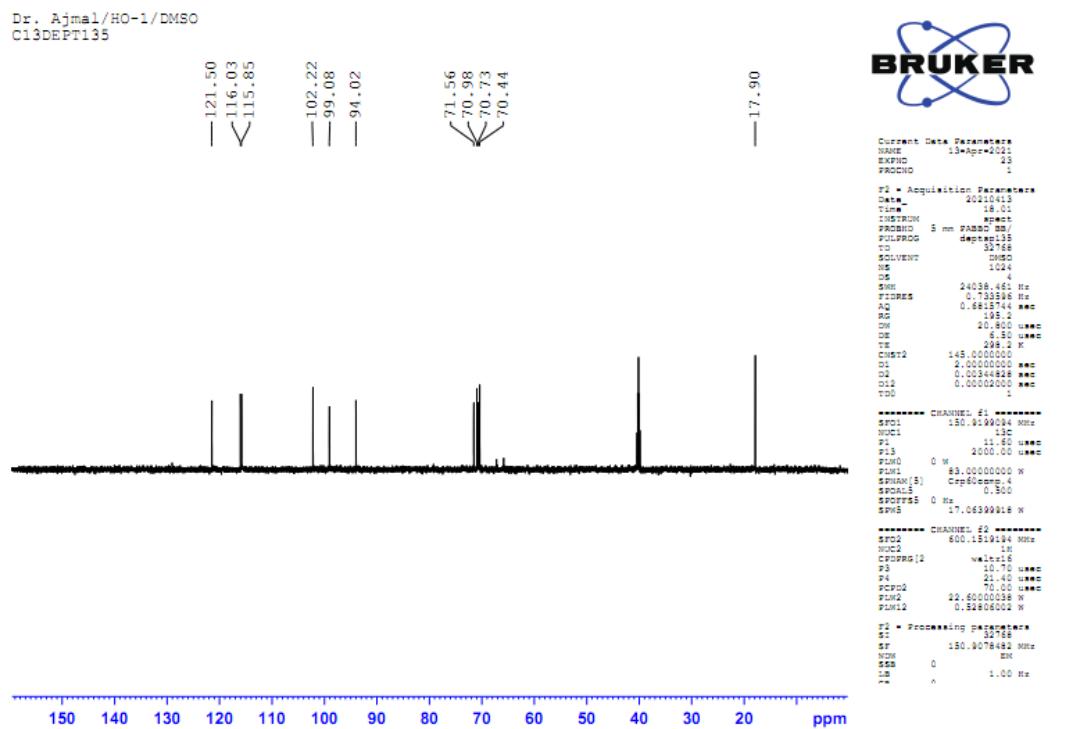
**Figure S1.** Mass spectrum of compound 1.



**Figure S2.** IR spectrum of compound 1.

Figure S3.  $^1\text{H}$  NMR spectrum of compound 1.Figure S4.  $^1\text{H}$  NMR spectrum of compound 1.

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Figure S5.  $^{13}\text{C}$  NMR spectrum of compound 1.Figure S6.  $^{13}\text{C}$  DEPT 135 NMR spectrum of compound 1.

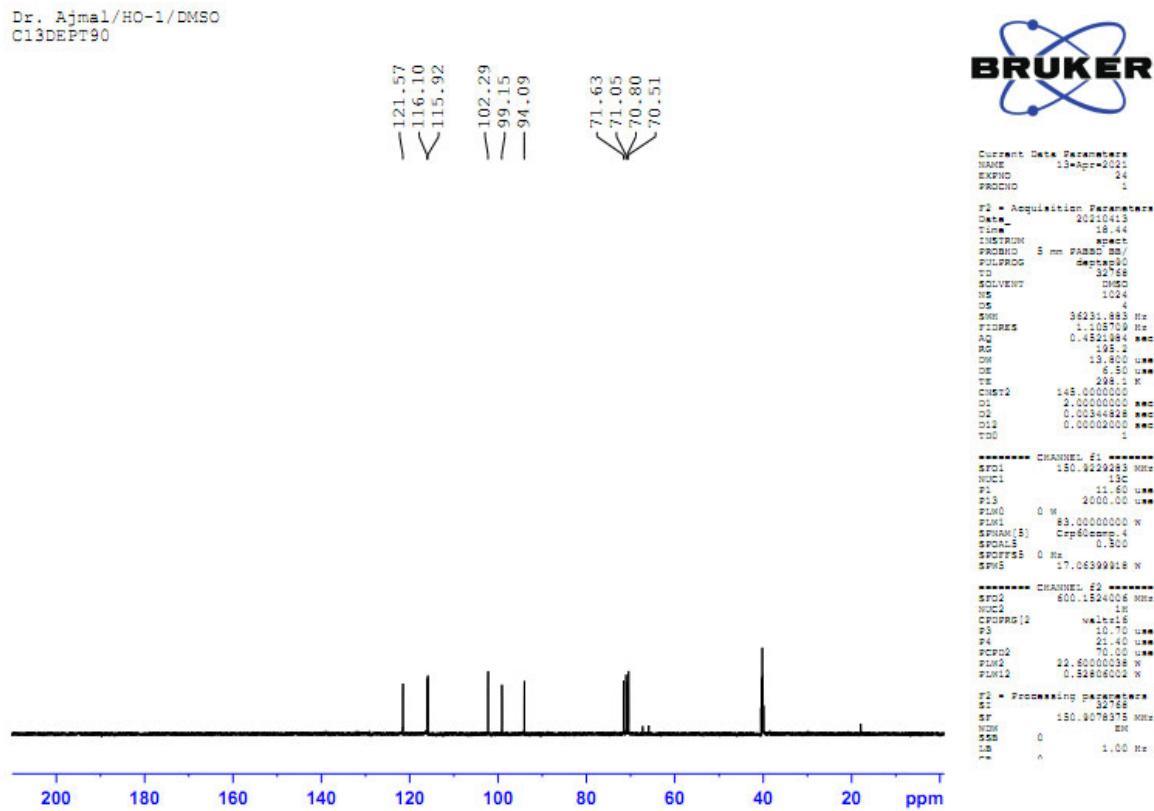
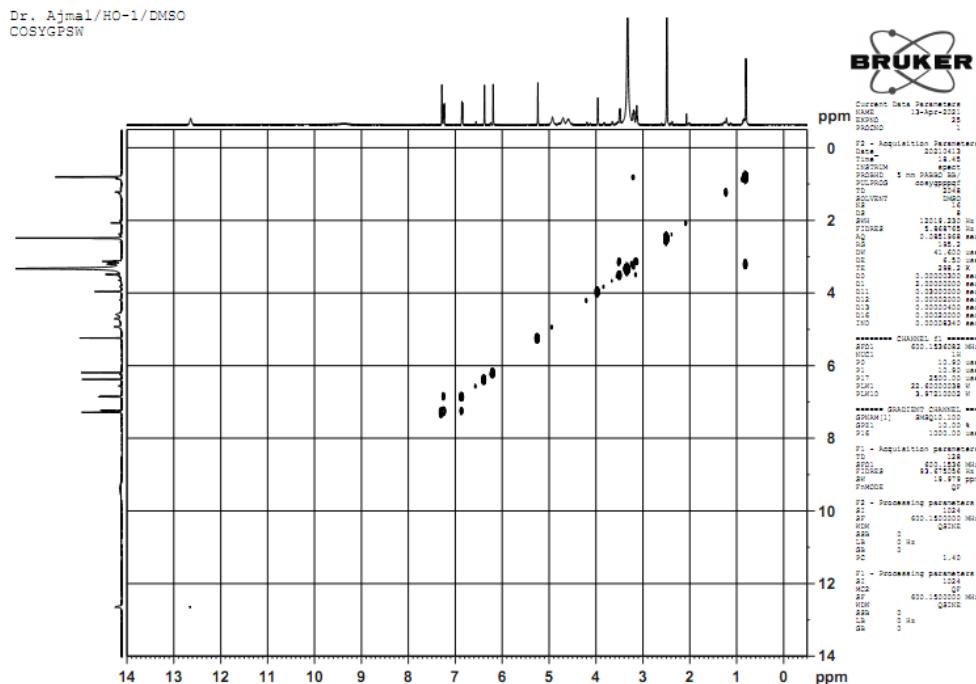
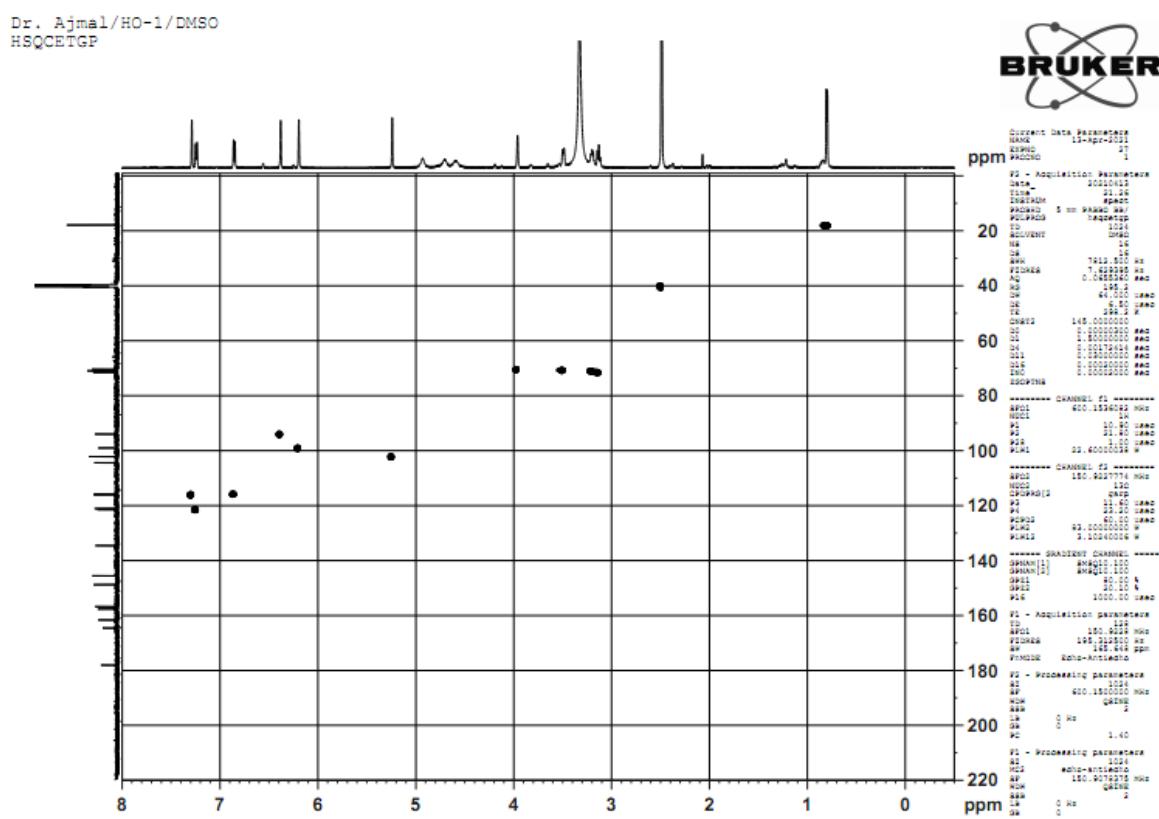
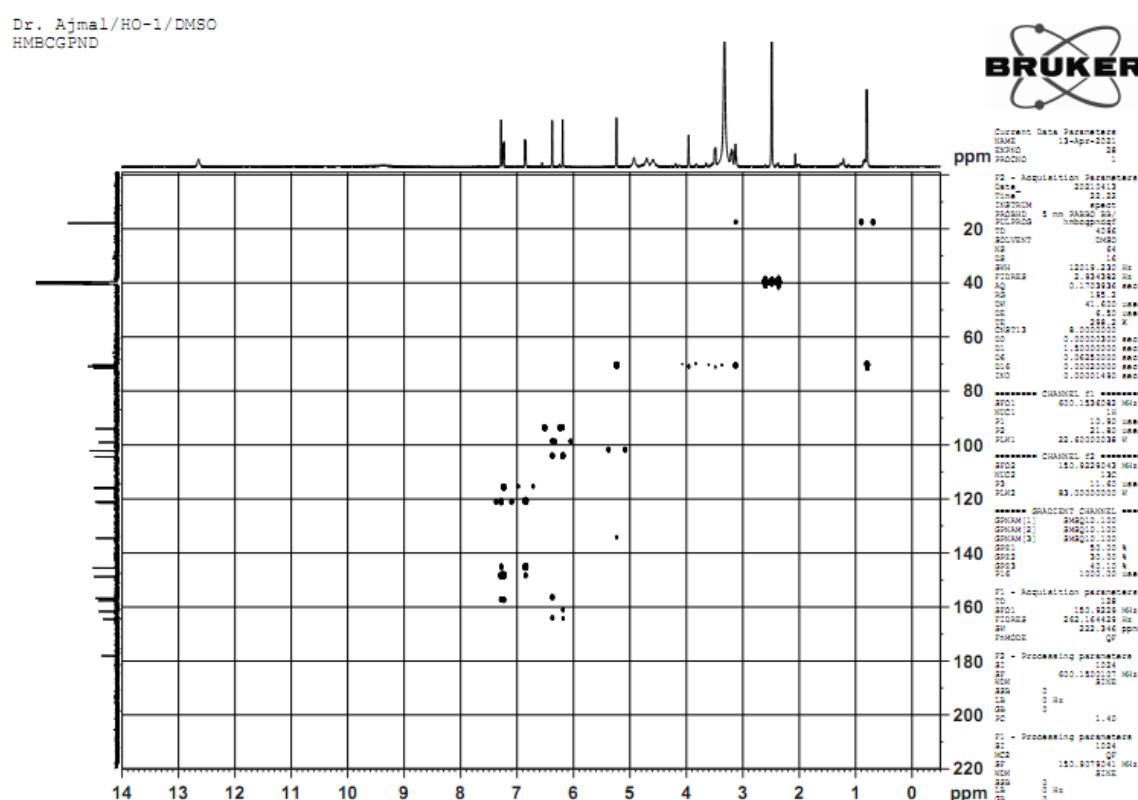
Figure S7.  $^{13}\text{C}$  DEPT 90 NMR spectrum of compound 1.

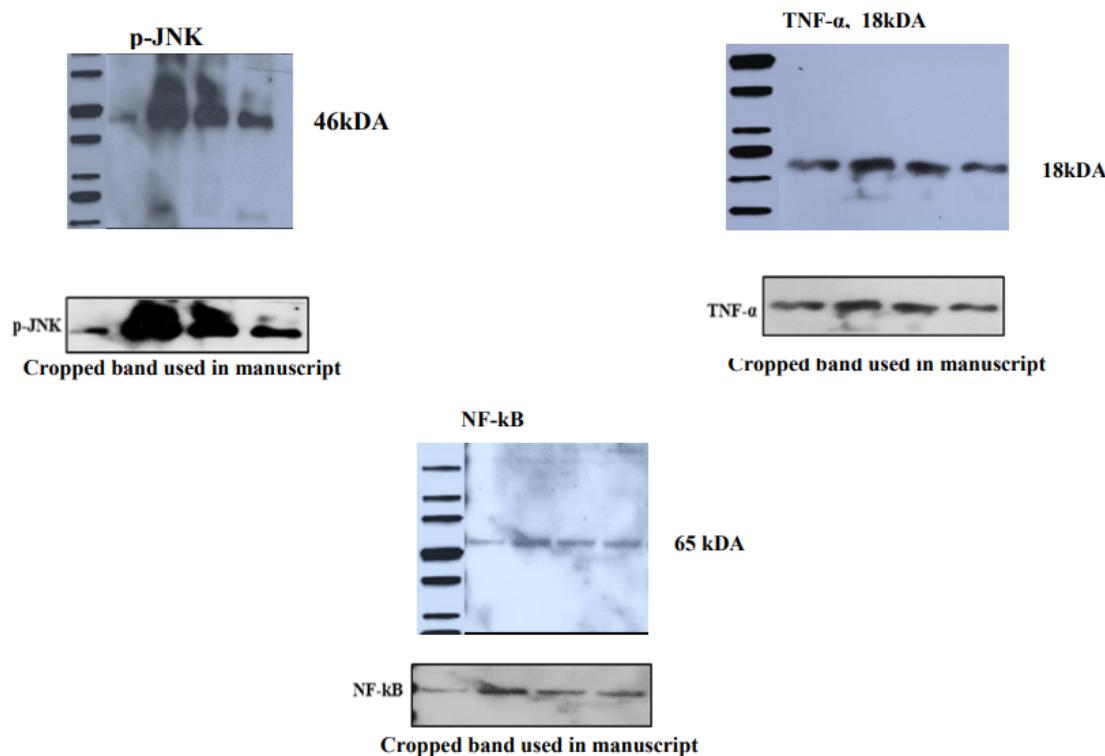
Figure S8. COSY spectrum of compound 1.



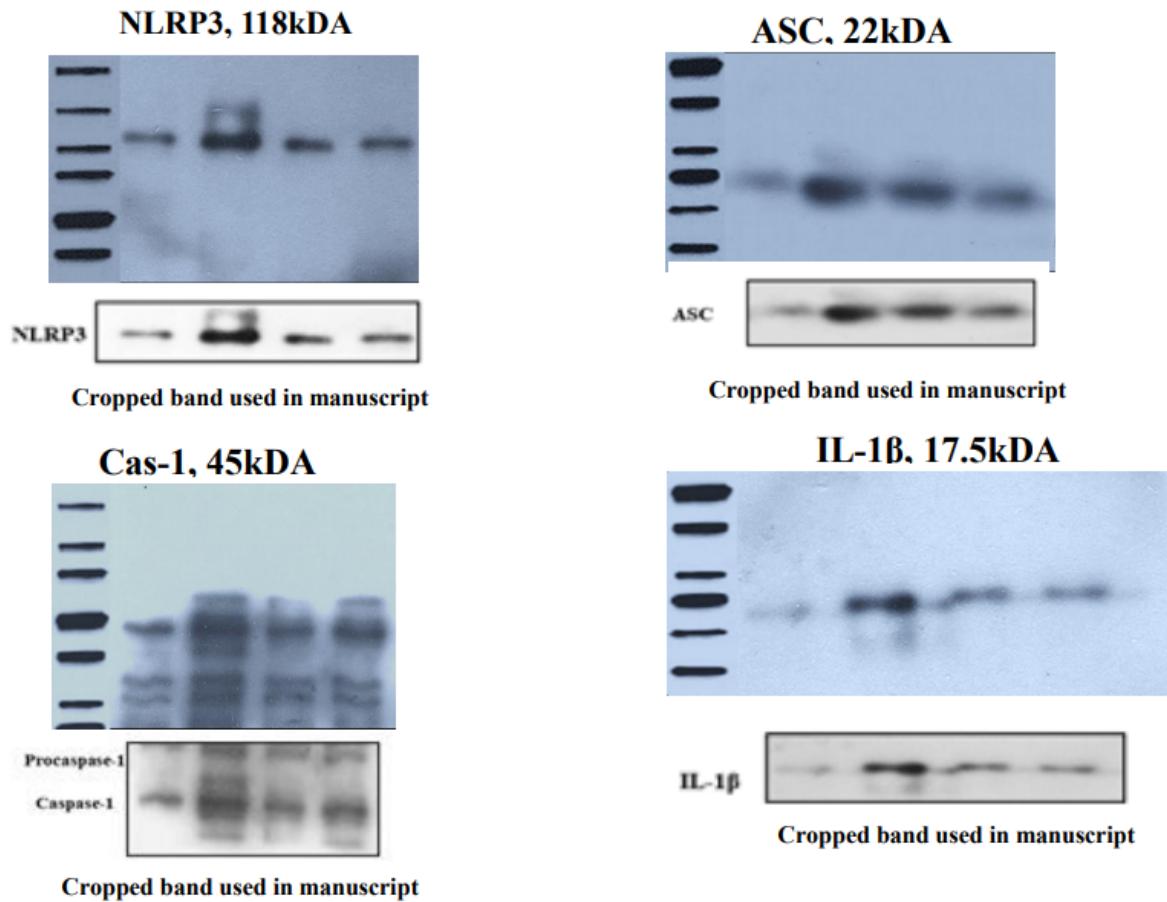
**Figure S9.** HSQC spectrum of compound 1.



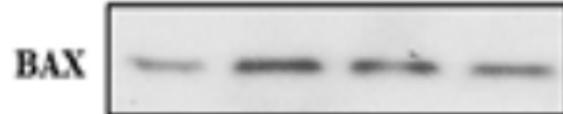
**Figure S10.** HMBC spectrum of compound 1.



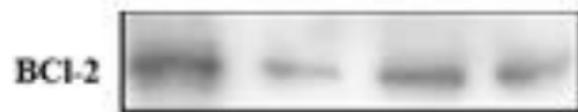
**Figure S11.** Folecitin inhibited neuroinflammatory markers in PND-7 pup brains.



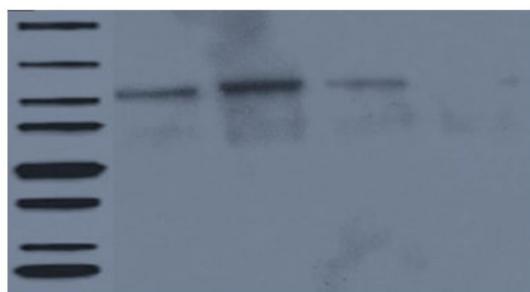
**Figure S12.** Figure 7. Folecitin deactivated NLRP3 inflammasome complex in PND-7 pup brains.

**BAX, 22kDA**

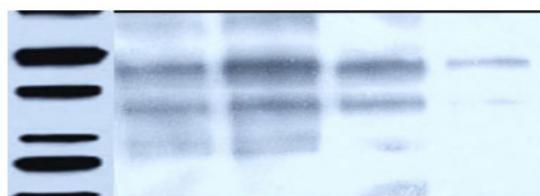
Cropped band used in manuscript

**BCl-2, 26kDA**

Cropped band used in manuscript

**PARP-1, 116/86kDA**

Cropped band used in manuscript

**Cas-3, 35kDA**

Cropped band used in manuscript

**Figure S13.** Figure 8. Folecitin reduced ethanol-induced neurodegeneration in PND-7 pup brains.