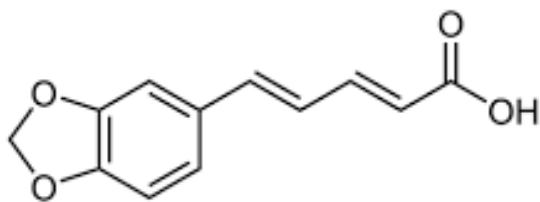


**CERTIFICATE OF ANALYSIS**

<b>Product Name</b>	Piperic Acid, Analytical standard		
<b>Synonyms</b>	(E,E)-Piperic acid		
<b>CAS No</b>	136-72-1		
<b>Product code</b>	SYI0055	<b>Batch No</b>	LPIBF0502
<b>Molecular Formula</b>	C <sub>12</sub> H <sub>10</sub> O <sub>4</sub>	<b>Molecular Weight</b>	218.21
<b>Mfg. Date</b>	May-26	<b>Expiry Date</b>	Apr-27
<b>Storage Conditions</b>	Store at 2-8 °C temperature, tightly closed container		

Test	Specification	Results
Appearance	Tan colour solid	Tan colour solid
Identification by Mass	Confirms to the structure	Confirms to the structure
Identification by H <sup>1</sup> NMR	Confirms to the structure	Confirms to the structure
Purity by HPLC	NTR 95.00%	99.93%



Approved by  
Dr. Gopinath PH. D



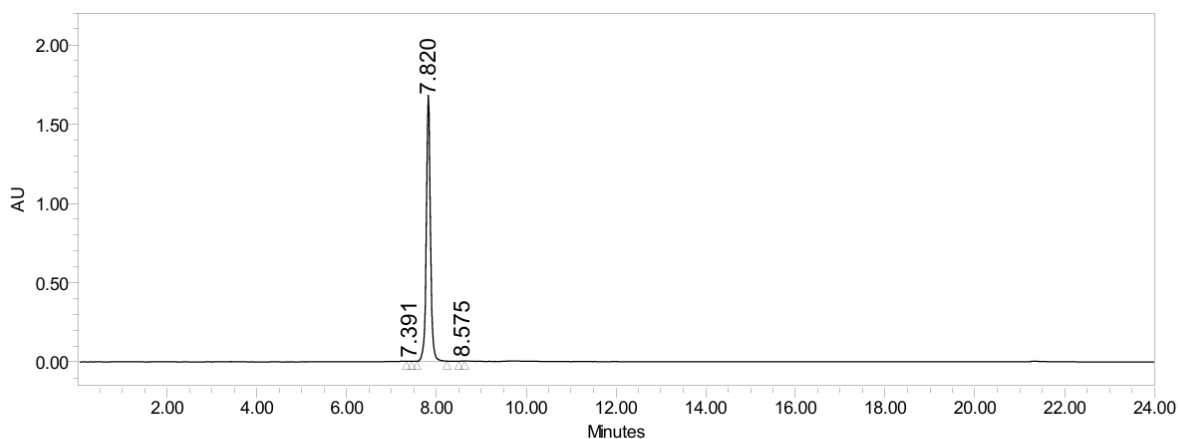
Computer Generated document, Does not require any Signature.

## Analytical HPLC Report

SAMPLE INFORMATION			
Sample Name:	LPIBF0502	Acquired By:	Analyst
Sample Type:	Unknown	Sample Set Name:	02052026 HPLC2 MORNING
Vial:	39	Acq. Method Set:	HPLC PURITY 24 MIN
Injection #:	1	Processing Method:	LC PQ
Injection Volume:	5.00 ul	Channel Name:	245.0nm
Run Time:	24.0 Minutes	Proc. Chnl. Descr.:	PDA 245.0 nm
Date Acquired: 5/2/2026 13:34:50 IST		Date Processed: 5/2/2026 14:37:59 IST	

**METHOD INFORMATION:**

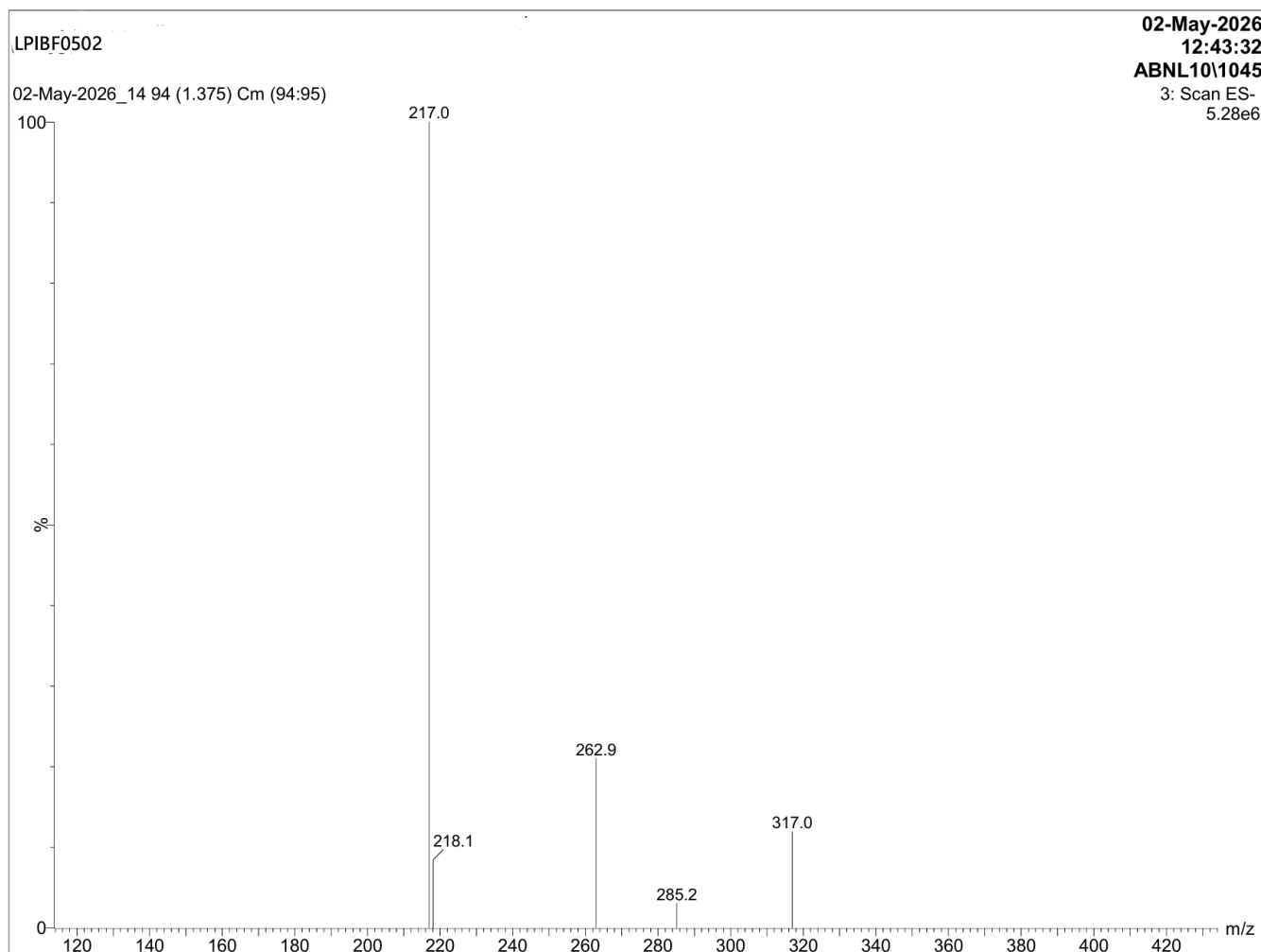
MP:A: 10MM AA IN 1000ML WATER.  
 MP:B: ACN:WATER (90:10)V/V.  
 CLOUMN:INERTSIL C18 (150\*4.6\*5)  
 FLOW: 1.0 ML/MIN  
 GRADIENT :0/10,3/10,10/100,19/100,19.5/10,24/10.



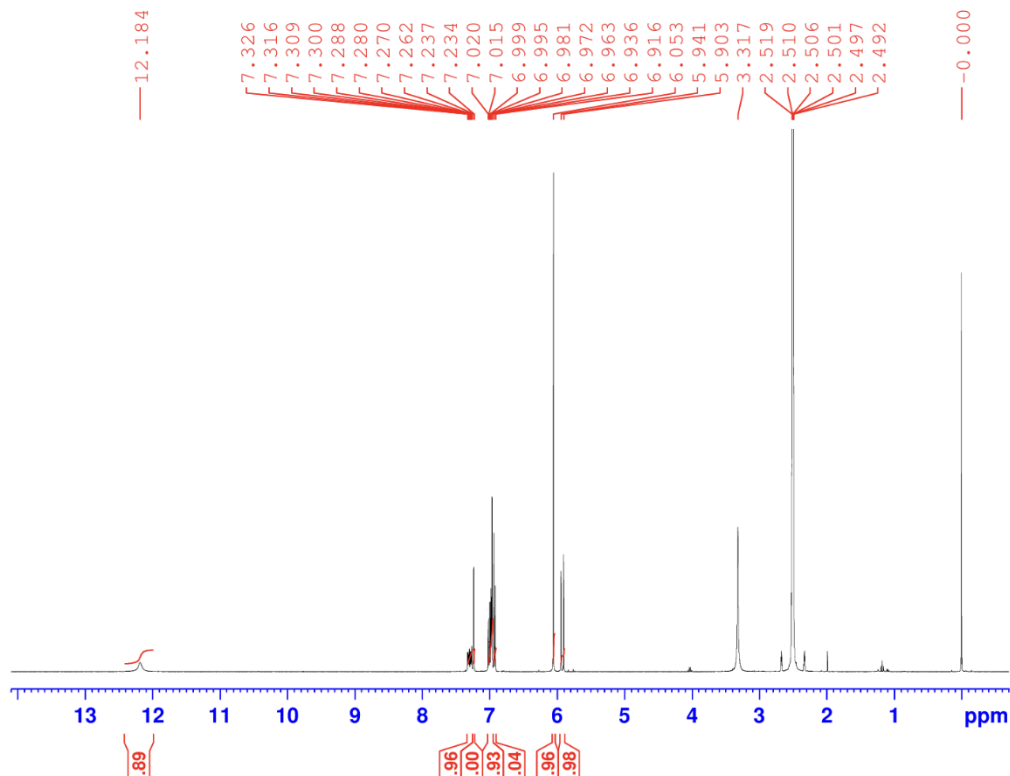
	RT	Area	% Area	Height
1	7.391	2002	0.02	522
2	7.820	10780798	99.93	1663797
3	8.575	5065	0.05	1132



## Identification by Mass spectrometry (MS)



## Identification by NMR: H1NMR


**Current Data Parameters**

```

NAME
EXPNO 1
PROCNO 1
    
```

**F2 - Acquisition Parameters**

```

Date_ 20260501
Time_ 19.09
INSTRUM Avance
PROBHD Z178277_0080
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 16
DS 2
SWH 7812.500
FIDRES 0.238419
AQ 4.1943040
RG 101
DW 64.000
DE 6.64
TE 298.2
D1 1.0000000
TD0 1
SF01 399.8224689
NUC1 1H
p0 2.67
P1 8.00
PLW1 22.6120000
    
```

**F2 - Processing parameters**

```

SI 65536
SF 399.8200032
WDW EM
SSB 0
LB 0.30
GB 0
PC 1.00
    
```

SA/AD/INS/014  
Verified By:KVS

**Current Data Parameters**

```

NAME
EXPNO 1
PROCNO 1
    
```

**F2 - Acquisition Parameters**

```

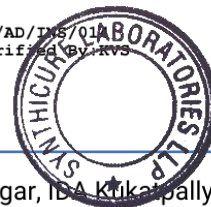
Date_ 20260501
Time_ 19.09
INSTRUM Avance
PROBHD Z178277_0080
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 16
DS 2
SWH 7812.500
FIDRES 0.238419
AQ 4.1943040
RG 101
DW 64.000
DE 6.64
TE 298.2
D1 1.0000000
TD0 1
SF01 399.8224689
NUC1 1H
p0 2.67
P1 8.00
PLW1 22.6120000
    
```

**F2 - Processing parameters**

```

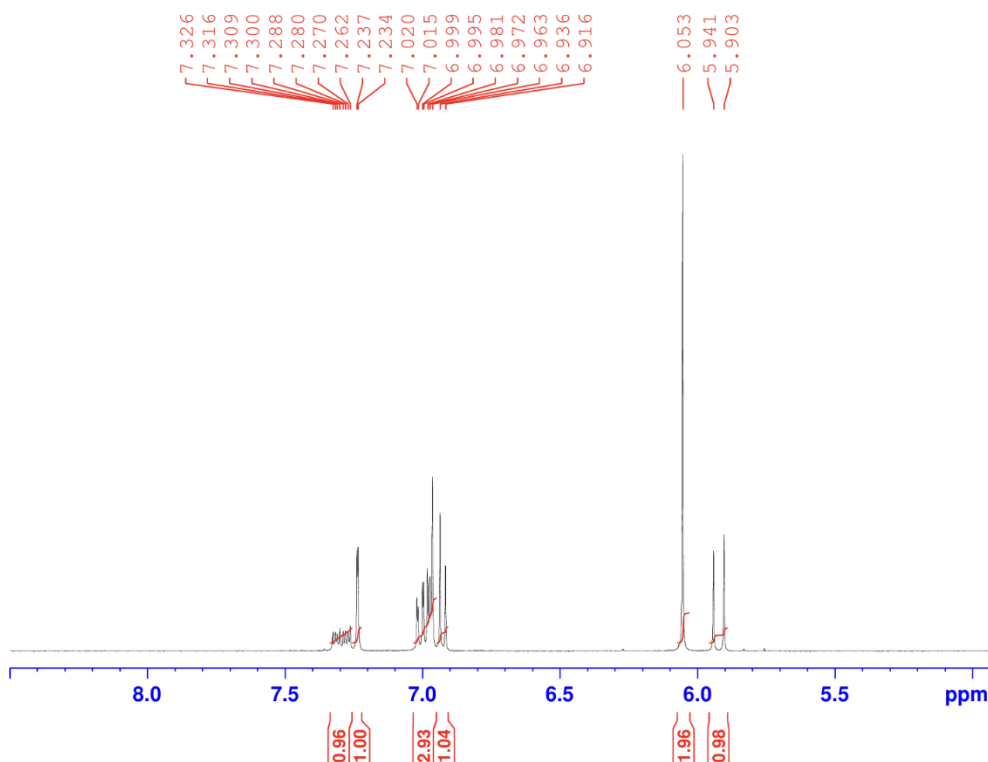
SI 65536
SF 399.8200032
WDW EM
SSB 0
LB 0.30
GB 0
PC 1.00
    
```

SA/AD/INS/014  
Verified By:KVS



## Identification by NMR: H1NMR

LPIBF0502



```

Current Data Parameters
NAME
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20260501
Time 19.09
INSTRUM Avance
PROBHD Z178277_0080
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 16
DS 2
SWH 7812.500
FIDRES 0.238419
AQ 4.1943040
RG 101
DW 64.000
DE 6.64
TE 298.2
D1 1.00000000
TD0 1
SF01 399.8224689
NUC1 1H
p0 2.67
P1 8.00
PLW1 22.61200000

F2 - Processing parameters
SI 65536
SF 399.8200032
WDW EM
SSB 0
LB 0.30
GB 0
PC 1.00
    
```

SA/AD/INS/014  
Verified By:KVS

