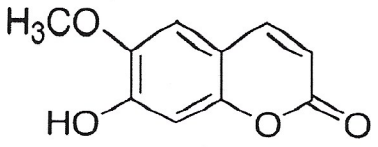
INDOFINE Chemical Company, Inc.
121 Stryker Lane, Bldg. 30, Suite 1 • Hillsborough, NJ 08844 • U.S.A.
Phone: (908) 359-6778 • FAX: (908) 359-1179
website: www.indofinechemical.com
e-mail: chemical@indofinechemical.com

CERTIFICATE OF ANALYSIS

Catalog Number:	H-109
Product Name:	**7-HYDROXY-6-METHOXYCOUMARIN** (Scopoletin)
CAS Number:	[92-61-5]
Lot Number:	1912373
Chemical Formula:	$C_{10}H_8O_4$
Molecular Weight:	192.17
Appearance:	Light yellow powder
Solubility:	Soluble in DMSO
Melting Point:	201-203°C
Water Content(KF):	0.36%
TLC:	Chloroform:Methanol (9:1)
Storage:	Store in a cool, dry place. Keep airproofed when package is not in use.
Purity(HPLC):	99.12%



Prepared by:
Ramesh Mandadi
Ramesh Mandadi
Director of Operations

Reviewed and approved by:
Sujata Moton
S. Moton
VP

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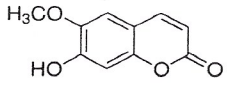
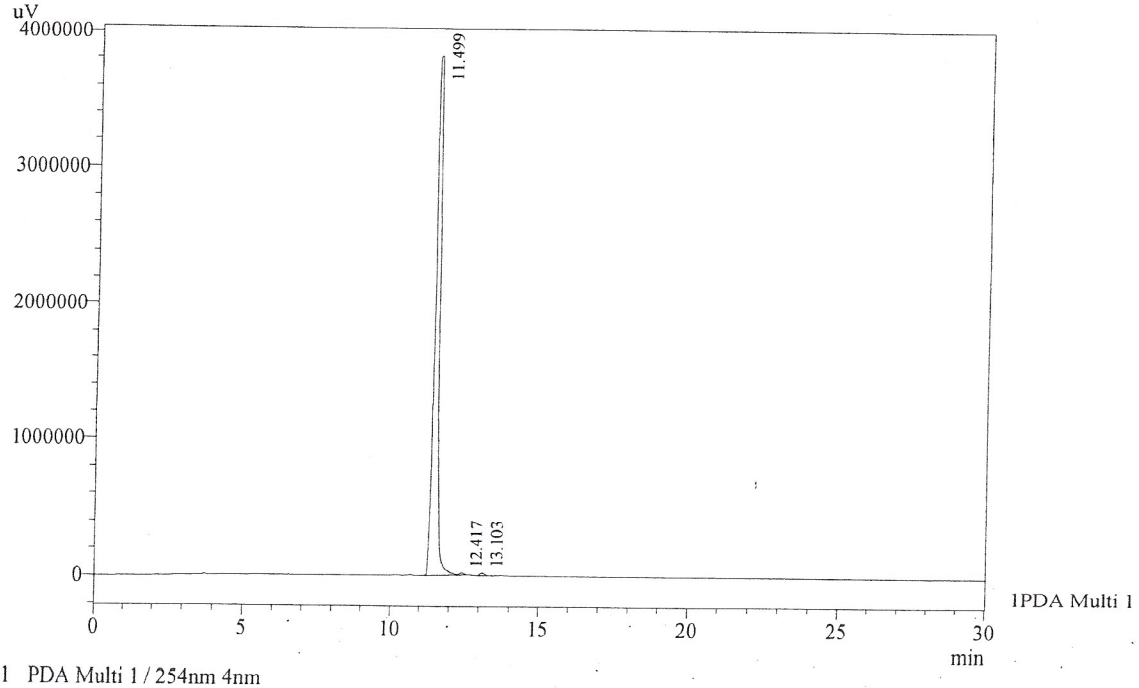
HPLC ANALYSIS

Acquired by	: Admin
Sample Name	: Scopoletin
Sample ID	: # 50 GM-LOT
Injection Volume	: 20 uL
Data Filename	: 021219D.lcd
Method Filename	: Linear Gradient-G.M.lcm
Report Filename	: Default.lcr

Catalog No.: H-109
Product Name: 7-Hydroxy-6-methoxycoumarin
Lot No.: 1912373



Chromatogram



1 PDA Multi 1 / 254nm 4nm

PeakTable

PDA Ch1 254nm 4nm

Peak#	Name	Ret. Time	Height	Area %	Relative Retention Time
1	RT:11.499	11.499	3809186	99.12	1.00
2	RT:12.417	12.417	16350	0.39	1.08
3	RT:13.103	13.103	19618	0.49	1.14
Total			3845154	100.00	

Prepared by:
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Director of Operations

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121 STRYKER LANE
BLDG. 30, SUITE 1
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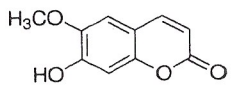
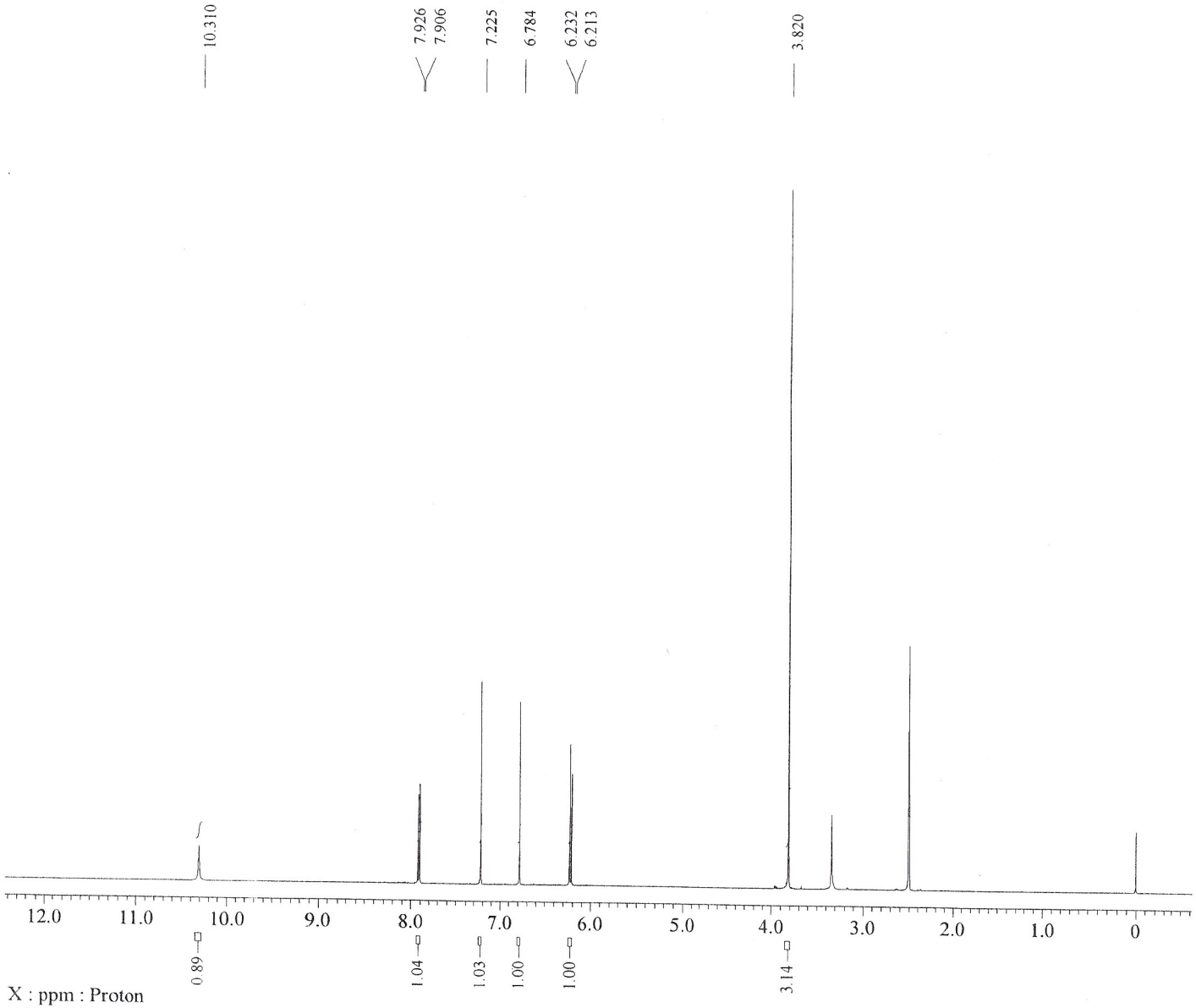


Catalog No.: H-109
Product Name: 7-Hydroxy-6-methoxycoumarin
Lot No.: 1912373

_proton-1-2.jdf




```
---- PROCESSING PARAMETERS ----
sexp( 0.2[Hz], 0.0[s] )
trapezoid( 0[%], 0[%], 80[%], 100[%] )
zerofill( 1 )
fft( 1, TRUE, TRUE )
machinephase
ppm
auto_reference( 5[%], TRUE )

Derived from: SCP.50gm


Filename          = SCP.50gm Lot
Instrument        - NMR-500MHz(JEOL)
Instrument id     - NMR-02
Author            = brm1440
Reviewed by       - Ramesh
Solvent           = DMSO-D6
Spectrometer      = JNM-ECZ500R/S1
Experiment        = proton.jxp

Acquisition Parameter
X_Domain          = Proton
X_Offset          = 7.0[ppm]
X_Sweep           = 11.28158845[kHz]
Scans             = 16
Relaxation_Delay  = 2[s]
```

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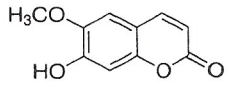

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Lot No.: 1912373

_proton-1-2.jdf

7.926
7.906
7.225
6.784
6.232
6.213

```
---- PROCESSING PARAMETERS ----
sexp( 0.2[Hz], 0.0[s] )
trapezoid( 0[%], 0[%], 80[%], 100[%] )
zerofill( 1 )
fft( 1, TRUE, TRUE )
machinephase
ppm
auto_reference( 5[%], TRUE )

Derived from: SCP.50gm
```

```
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Instrument        - NMR-500MHz(JEOL)
Instrument id     - NMR-02
Author            = brm1440
Reviewed by       - Ramesh
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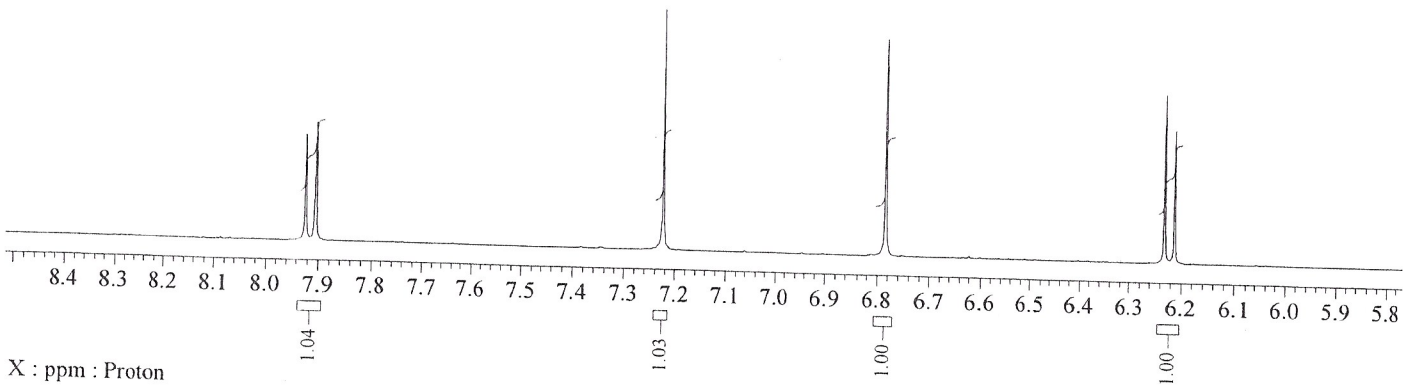

X : ppm : Proton