



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: 19-414

Product Name: **6-CHLORO-3(3',4'-DIMETHOXYPHENYL)-7-HYDROXY-4-METHYLCOUMARIN**

Lot Number: 0109091

Chemical Formula: C₁₈H₁₅ClO₅

Molecular Weight: 346.77

Melting Point: 246-249°C

Appearance: Light yellow powder

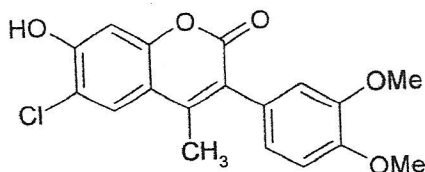
Solubility: Soluble in DMSO

TLC: Chloroform:Methanol (9:1)

NMR Spectrum: Enclosed (Confirms to the structure)

Storage: Cool dry place

Purity (HPLC): 98.30%





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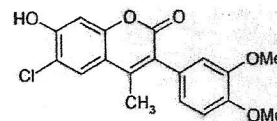
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HPLC ANALYSIS

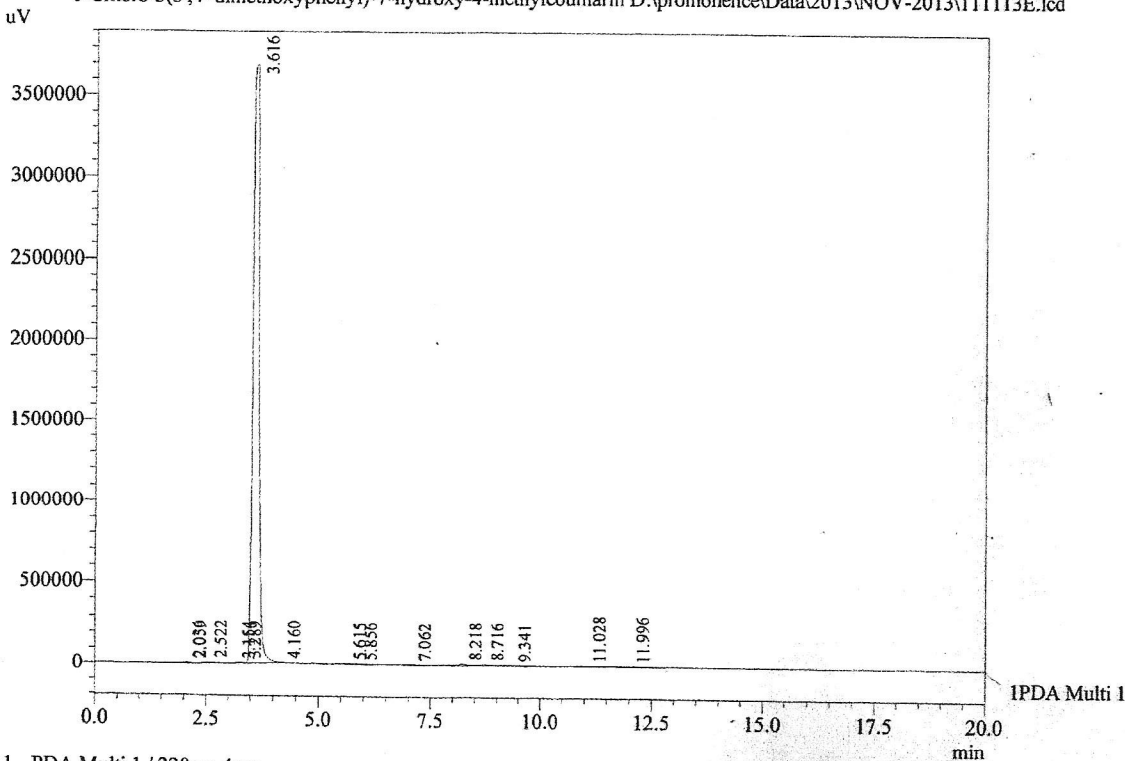
Acquired by : Sanjeev
 Sample Name : 6-Chloro-3(3',4'-dimethoxyphenyl)-7-hydroxy-4-methylcoumarin
 Sample ID : Lot No: 0109091
 Injection Volume : 20 uL
 Data Filename : 111113E.lcd
 Method Filename : Linear Isocratic.M.lcm

Catalog No.: 19-414
 Product Name: 6-Chloro-3(3',4'-dimethoxyphenyl)-7-hydroxy-4-methylcoumarin
 Lot No.: 0109091

Column : LUNA C-18(2), (250mm x4.6mm 5.0μ)
 Flow : 1.000 mL/min.
 Mobile Phase : A(20% of 0.05% TFA in water) B(80% of Acetonitrile)
 Diluent : Acetonitrile



Chromatogram
 6-Chloro-3(3',4'-dimethoxyphenyl)-7-hydroxy-4-methylcoumarin D:\promonence\Data\2013\NOV-2013\111113E.lcd



1 PDA Multi 1 / 220nm 4nm

PeakTable

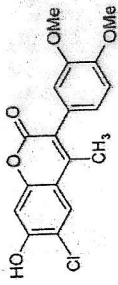
PDA Ch1 220nm 4nm

Peak#	Name	Ret. Time	Area	Area %	Relative Retention Time
1	RT:2.036	2.036	29410	0.08	0.56
2	RT:2.059	2.059	38999	0.11	0.57
3	RT:2.522	2.522	64527	0.18	0.70
4	RT:3.154	3.154	10787	0.03	0.87
5	RT:3.289	3.289	26558	0.07	0.91
6	RT:3.616	3.616	35340701	98.30	1.00
7	RT:4.160	4.160	3222	0.01	1.15
8	RT:5.615	5.615	13562	0.04	1.55
9	RT:5.856	5.856	3705	0.01	1.62
10	RT:7.062	7.062	5421	0.02	1.95
11	RT:8.218	8.218	127777	0.36	2.27
12	RT:8.716	8.716	134393	0.37	2.41
13	RT:9.341	9.341	68003	0.19	2.58
14	RT:11.028	11.028	50846	0.14	3.05
15	RT:11.996	11.996	33340	0.09	3.32
Total			35951250	100.00	



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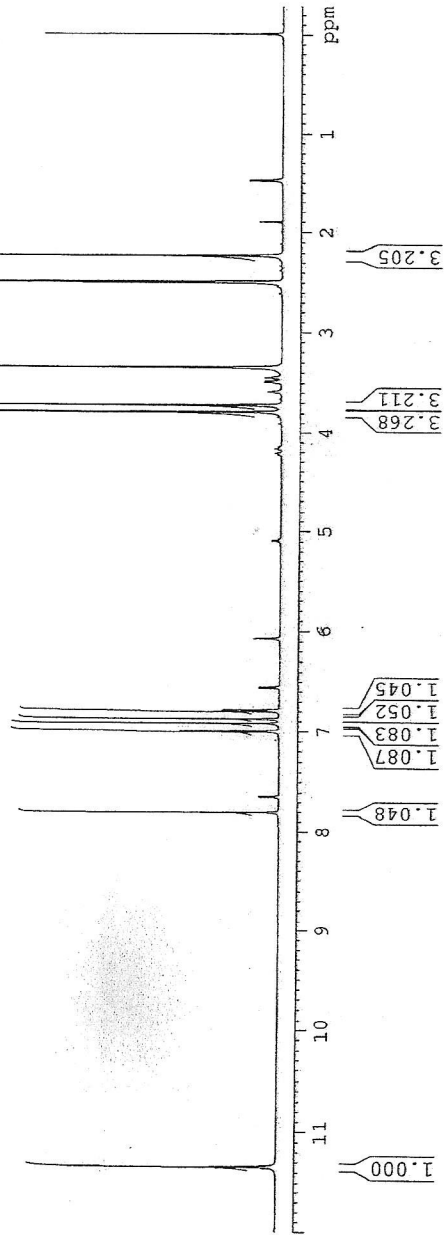
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7-hydroxy-4-methylcoumarin
Lot No.: 0109091



SOLVENT DMSO
NS 16
SRH 10096.728 Hz
FIDRES 0.334247 Hz
AQ 1.4353502 sec
RG 28.5
DM 49.867 usec
DE 6.00 usec
TE 288.3 K
TD 1.5000000 sec
1

1H IN DMSO
AVANCE-600

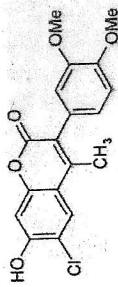
***** CHANNEL f1 *****
NUC1 1H
P1 7.50 usec
PL1 2.60 dB
PL1W 6.62884448 W
SFO1 600.330371 MHz
SF 600.330371 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
FC 1.00





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Catalog No.: 19-414
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 7-hydroxy-4-methylcoumarin
 Lot No.: 0109091



SOLVENT DMSO
 NS 10
 DS 10
 SWH 10026.738 Hz
 FIDRES 0.334547 Hz
 AQ 1.4959502 sec
 RG 28.5
 DE 49.567 usec
 TE 295.00 K
 DI 1.50000001 sec
 TDO 1

***** CHANNEL F1 *****
 NUCL 1H
 PULP 7.50 usec
 PL1 2.60 dB
 PLLW 6.6325878 MHz
 SF01 600.3345378 MHz
 SI 32768
 SF 600.3300115 MHz
 EM 0
 RDW 0.30 Hz
 SSB 0
 LB 0
 GC 0
 PC 1.00

