



INDOFINE Chemical Company, Inc.

121 Stryker Lane, Bldg. 30, Suite 1 • Hillsborough, NJ 08844 • U.S.A.

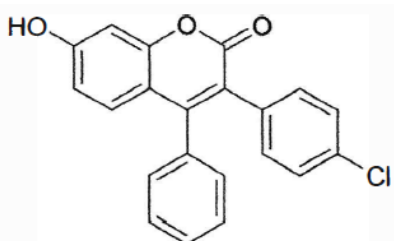
Phone: (908) 359-6778 • FAX: (908) 359-1179

website: www.indofinechemical.com

e-mail: chemical@indofinechemical.com

CERTIFICATE OF ANALYSIS

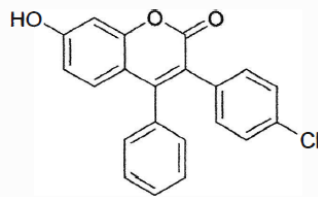
<u>Catalog Number:</u>	19-015
<u>Product Name:</u>	3(4'-CHLOROPHENYL)-7-HYDROXY-4-PHENYLCOUMARIN
<u>Lot Number:</u>	98072
<u>Chemical Formula:</u>	$C_{21}H_{13}ClO_3$
<u>Molecular Weight:</u>	348.78
<u>Melting Point:</u>	286-289°C
<u>Appearance:</u>	Yellow powder
<u>Solubility:</u>	Soluble in DMSO
<u>TLC:</u>	Chloroform : Methanol (9:1)
<u>NMR Spectrum:</u>	Enclosed (Confirms to the structure)
<u>Storage:</u>	Cool dry place
<u>Purity (HPLC):</u>	97.89%





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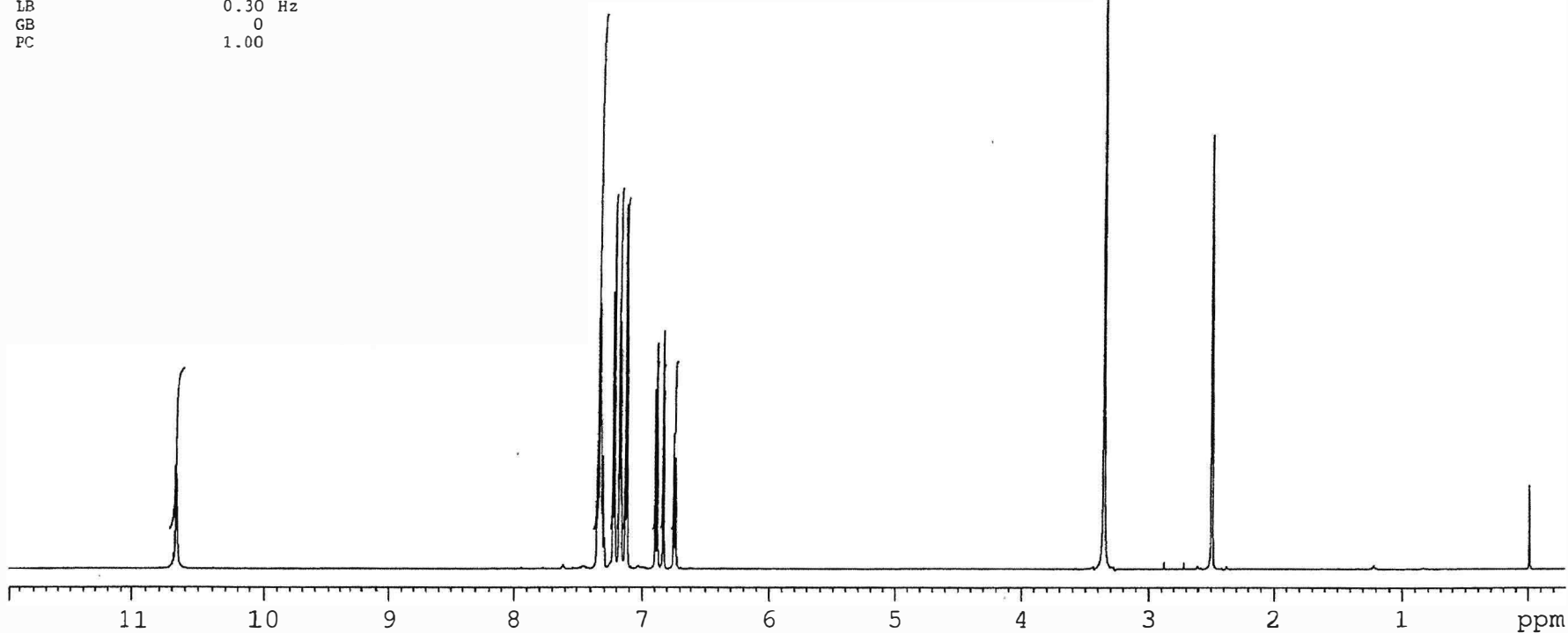
Product Name: 3-(4'-Chlorophenyl)-7-hydroxy-4-phenylcoumarin

Lot No.: 98072

SOLVENT DMSO
NS 16
DS 0
SWH 9803.922 Hz
FIDRES 0.326819 Hz
AQ 1.5299480 sec
RG 22.6
DW 51.000 usec
DE 6.00 usec
TE 298.2 K
D1 1.50000000 sec
TDO 1

ICC-APR-09
1H IN DMSO
AVANCE-600

==== CHANNEL f1 =====
NUC1 1H
P1 7.50 usec
PL1 2.60 dB
PL1W 6.62584448 W
SFO1 600.3345228 MHz
SI 32768
SF 600.3300113 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



1.000

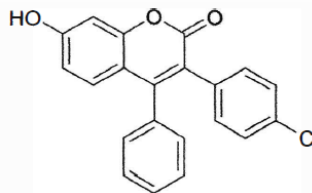
3.208
2.079
2.121
2.057
1.040
1.021
1.041



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GB 0
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7.351
7.340
7.327
7.321
7.314
7.310
7.298

7.227
7.213

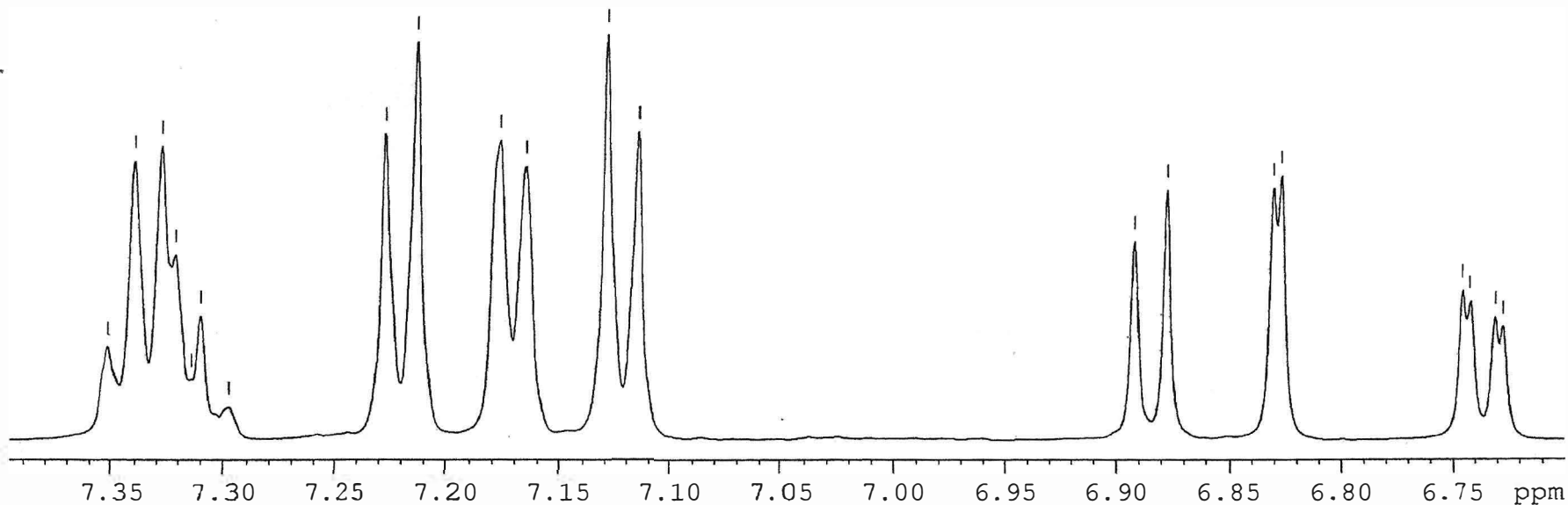
7.176
7.165

7.129
7.115

6.892
6.877

6.830
6.827

6.745
6.742
6.731
6.727





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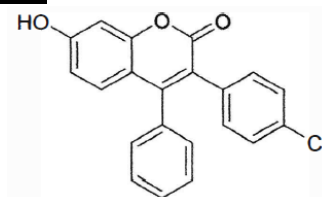
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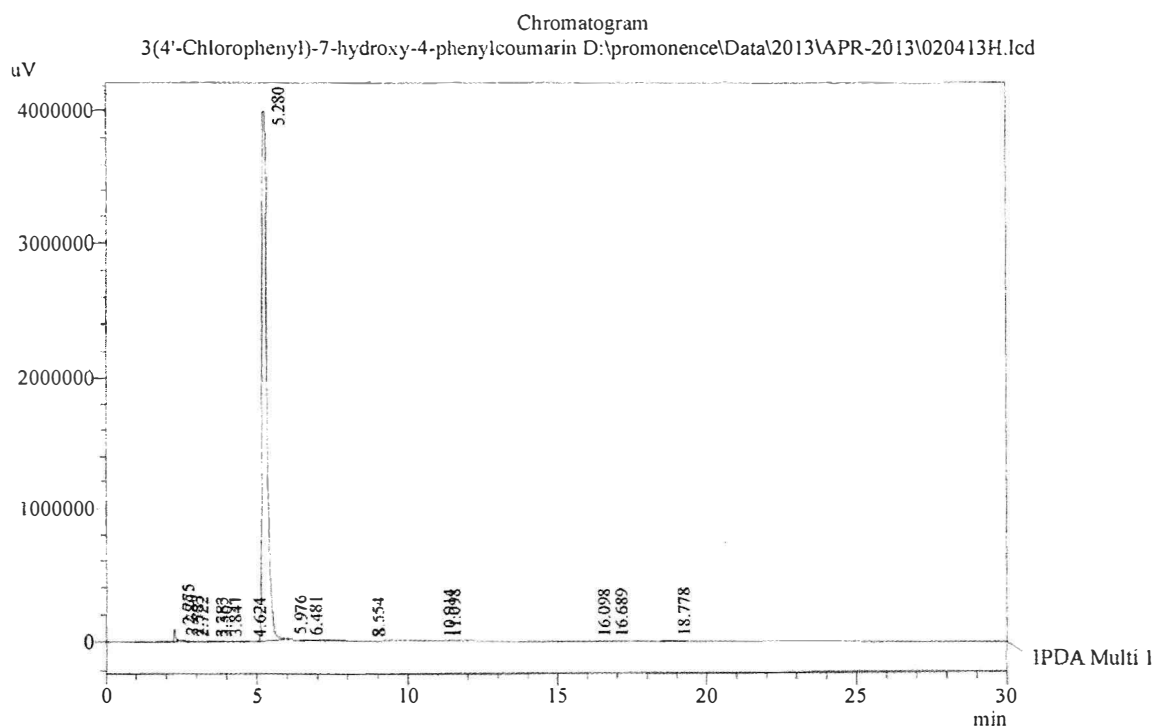
E-mail: chemical@indofinechemical.com

HPLC ANALYSIS



Acquired by : Sanjeev
 Sample Name : 3(4'-Chlorophenyl)-7-hydroxy-4-phenylcoumarin
 Sample ID : Lot No:- 98072
 Injection Volume : 20 uL
 Data Filename : 020413H.lcd
 Method Filename : Linear Isocratic.M.lcm
 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)

Catalog No.: 19-015
 Product Name: 3(4'-Chlorophenyl)-7-hydroxy-4-phenylcoumarin
 Lot No.: 98072



1 PDA Multi 1 / 220nm 4nm

PeakTable

PDA Ch1 220nm 4nm

Peak#	Name	Ret. Time	Area	Area %	Relative Retention Time
1	RT:2.275	2.275	376240	0.83	0.43
2	RT:2.380	2.380	55768	0.12	0.45
3	RT:2.583	2.583	45183	0.10	0.49
4	RT:2.722	2.722	12003	0.03	0.52
5	RT:3.383	3.383	15499	0.03	0.64
6	RT:3.502	3.502	8135	0.02	0.66
7	RT:3.841	3.841	40349	0.09	0.73
8	RT:4.624	4.624	48190	0.11	0.88
9	RT:5.280	5.280	44443105	97.89	1.00
10	RT:5.976	5.976	16487	0.04	1.13
11	RT:6.481	6.481	52877	0.12	1.23
12	RT:8.554	8.554	8506	0.02	1.62
13	RT:10.914	10.914	12251	0.03	2.07
14	RT:11.098	11.098	9977	0.02	2.10
15	RT:16.098	16.098	8625	0.02	3.05
16	RT:16.689	16.689	37945	0.08	3.16
17	RT:18.778	18.778	207920	0.46	3.56
Total			45399058	100.00	