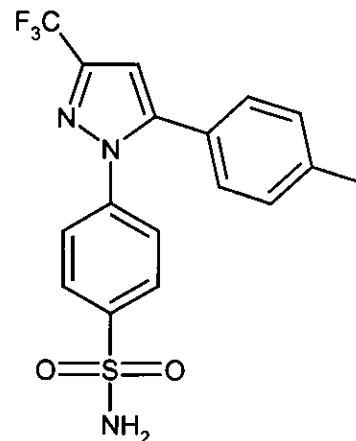


CERTIFICATE OF ANALYSIS

Celecoxib, >99%

<u>LC LABS CAT. NO.</u>	C-1502
<u>CHEMICAL NAME</u>	Celecoxib
<u>FORMULA</u>	C ₁₇ H ₁₄ F ₃ N ₃ O ₂ S
<u>M.W.</u>	381.37
<u>CAS NO.</u>	169590-42-5
<u>STORAGE</u>	Store at or below -20 °C
<u>SOLUBILITY</u>	Soluble in DMSO at 200 mg/mL; Soluble in Ethanol at 100 mg/mL; Very poorly soluble in water; maximum water solubility is estimated to be about 10-50 µM.



ANALYTICAL DATA

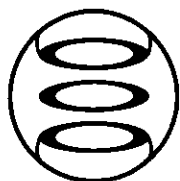
<u>LOT NUMBER</u>	CXB-104
<u>FORM</u>	Crystalline solid; granular or powder
<u>COLOR</u>	White
<u>HPLC PURITY</u>	>99% (see attached chromatogram)
<u>TLC PURITY</u>	>99% (see attached chromatogram)
<u>MELTING POINT</u>	160-162 °C
<u>ELEMENTAL ANALYSIS</u>	For C ₁₇ H ₁₄ F ₃ N ₃ O ₂ S:

	<u>Calculated</u>	<u>Found</u>
C	53.54%	53.74%
H	3.70%	3.78%
F	14.94%	14.68%
N	11.02%	11.11%
S	8.41%	8.62%

EXPIRATION DATE: June 19, 2024 (if stored tightly capped at -20 °C)

June 19, 2014

D:\COFA-BIZ\LC-M-COFA\CXB104FL.WPD



LC Laboratories®

Cat. No. C-1502

Celecoxib

Lot CXB-104

>99%

RUN# 8625

JUN 17, 2014 11:53:02

AREA%

RT	AREA	TYPE	WIDTH	AREA%
4.019	2617082	PB	.119	99.70122
4.766	7843	BP	.269	.29879

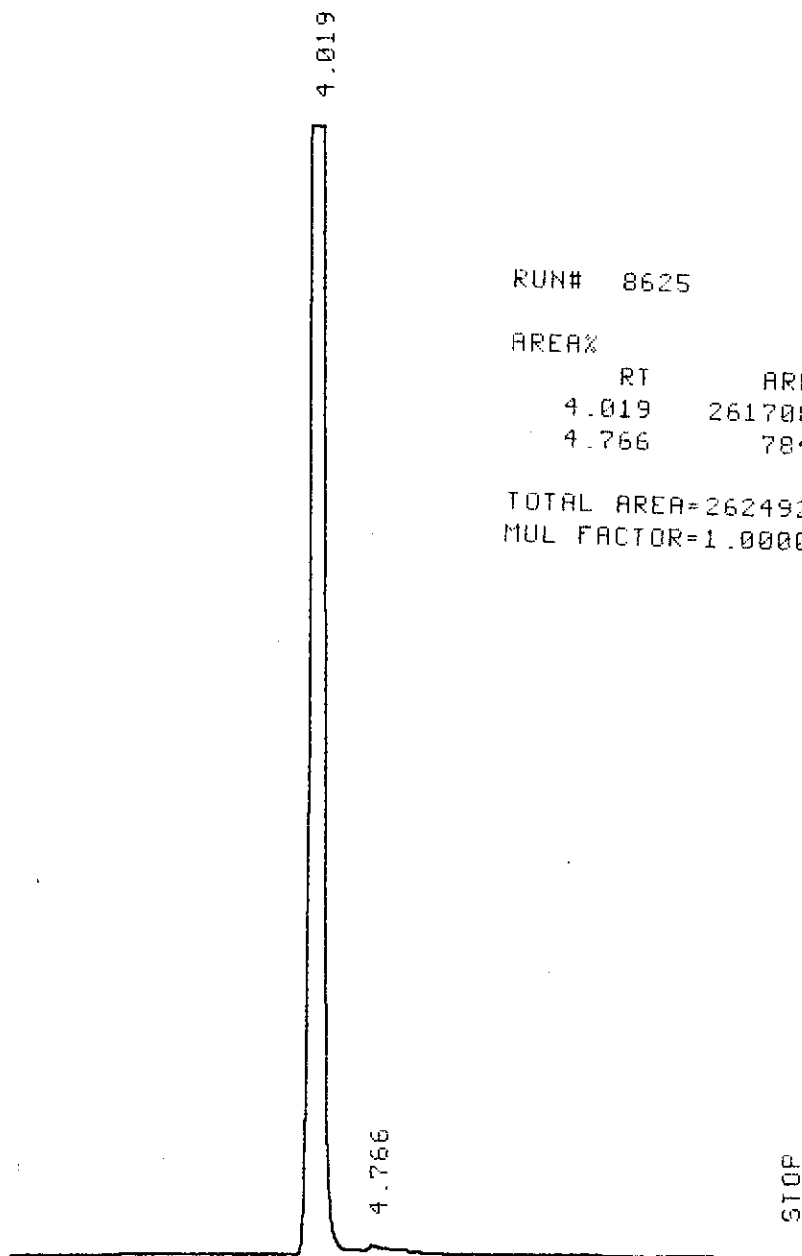
TOTAL AREA=2624925

MUL FACTOR=1.0000E+00

*CAT. No. C-1502 CELECOXIB LOT No. CXB-104 BREAK

* RUN # 8625 JUN 17, 2014 11:53:02

START

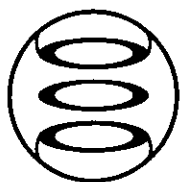


HPLC: C₁₈ Column, 4.6 mm x 25 cm

Acetonitrile/Methanol/Water/Trifluoroacetic Acid 36/36/28/0.1

2 mL/min

UV₂₅₄ Detection



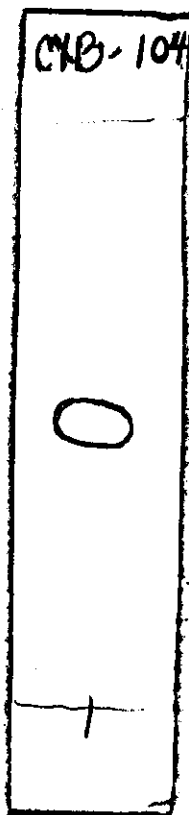
LC Laboratories®

Cat. No. C-1502

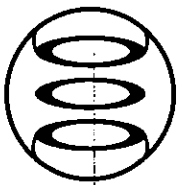
Celecoxib

Lot CXB-104

>99%



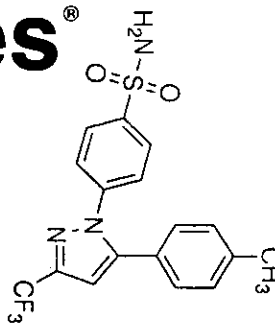
- TLC: 60 Å silica gel plates with fluorescent indicator
- Develop with Chloroform/Methanol/conc.NH₄OH 88/12/1
- Visualize via short wave UV fluorescence quenching
- A Iso visualize by exposure to iodine vapor



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Cat. No. C-1502
Celecoxib
Lot CXB-104
>99%

¹H NMR (500 MHz; DMSO-d6): 0
7.84 (m, 2H), 7.54-7.51 (m, 4H),
7.2-7.17 (m, 5H), 2.30 (s, 3H).



7.868
7.863
7.859
7.850
7.846
7.841
7.837
7.532
7.528
7.518
7.514
7.506
7.218
7.216
7.214
7.200
7.191
7.186
7.178
7.177
7.174

10
9
8
7
6
5
4
3
2
1
0

2.02

4.01

5

3.03

2.298

CXB 22169 1500 g DMSO 20140627
Acquisition Date: Jun 27 2014
Spectrometer Freq.: 499.81 MHz
Solvent: dms0
Temperature: 323.15 K
Sweep Width: 16.03 ppm
Number of Scans: 16
Relaxation Delay: 1.000 s