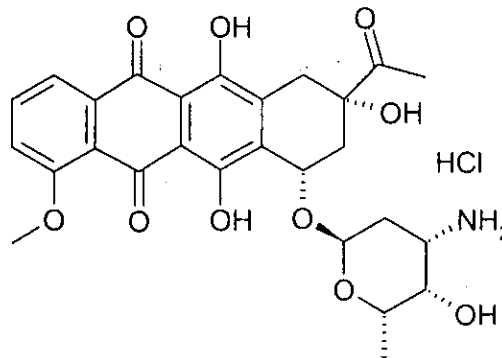


# LC Laboratories®

## CERTIFICATE OF ANALYSIS

### Daunorubicin, Hydrochloride Salt, >98%

LC LABS CAT. NO.    **D-6660**  
FORMULA             $C_{27}H_{29}NO_{10} \bullet HCl$   
M.W.                 563.98  
CAS NO.            [23541-50-6]  
STORAGE          Store at or below -20 °C\*\*\*  
SOLUBILITY        Soluble in DMSO.



## ANALYTICAL DATA

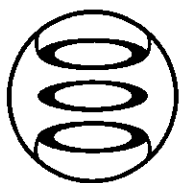
LOT NUMBER      **DNR-101**  
FORM                Crystalline solid; granular or powder  
COLOR              Red  
HPLC PURITY      >98% (see attached chromatogram)  
TLC PURITY        >98% (see attached chromatogram)  
ELEMENTAL ANALYSIS    For  $C_{27}H_{29}NO_{10} \bullet HCl \bullet 0.7H_2O$ :

	<u>Calculated</u>	<u>Found</u>
C	56.24%	56.27%
H	5.49%	5.60%
Cl	6.15%	6.16%
N	2.43%	2.44%

\*\*\*This product is stable at ambient temperature for several weeks during ordinary shipping and time spent in Customs or other delay. For long-term stability, store tightly closed at -20 °C.

January 27, 2020

D:\COFA-BI2\IC-M-COFA\DNR101FL.WPD



# LC Laboratories®

Cat. No. D-6660

**Daunorubicin, Hydrochloride Salt**

Lot DNR-101

>98%

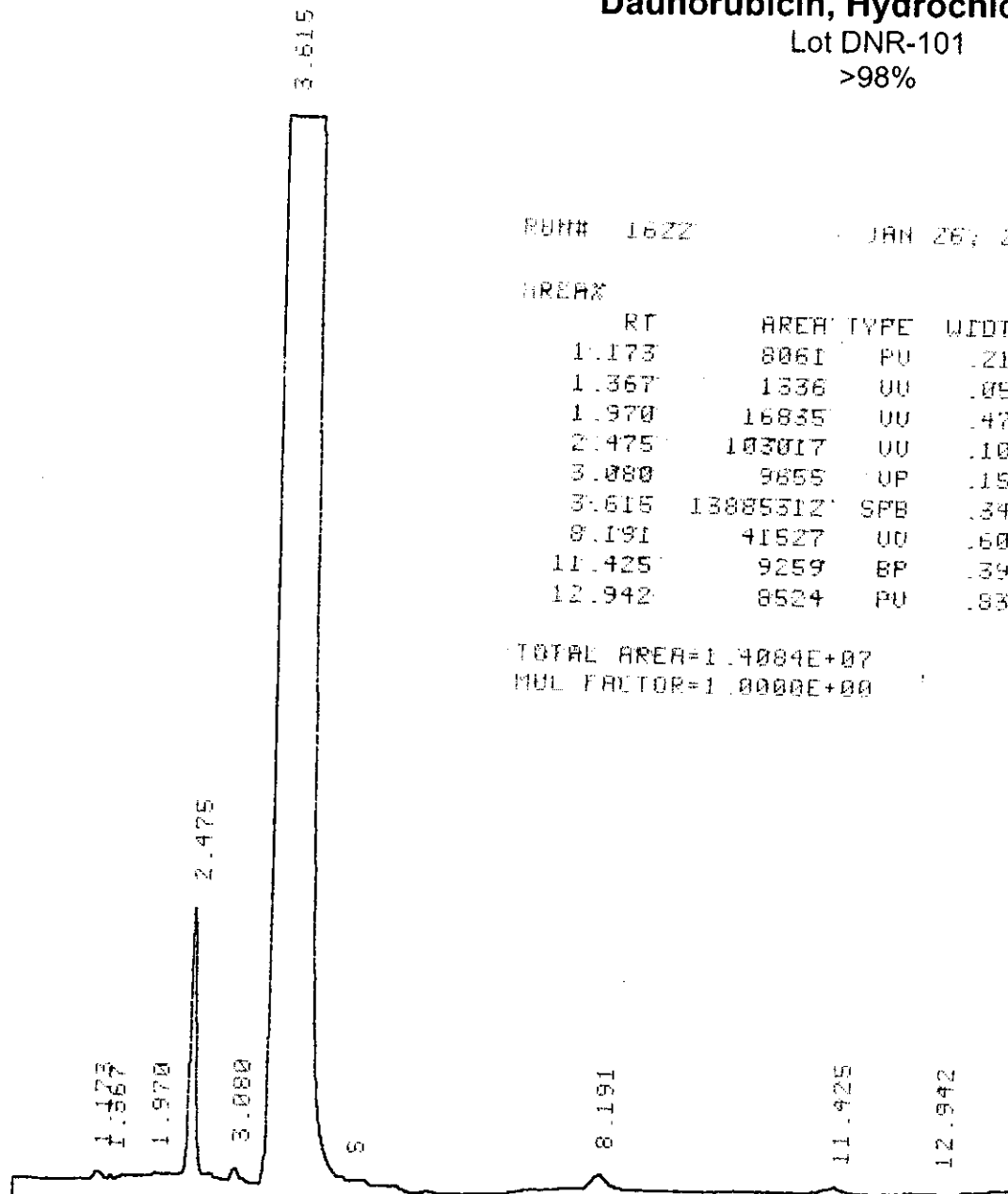
RUN# 1622      JAN 26, 2020 17:41:50

AREAX

RT	AREA	TYPE	WIDTH	AREAX
1.173	8061	PU	.213	.05724
1.367	1336	UU	.054	.00949
1.970	16835	UU	.472	.11954
2.475	103017	UU	.104	.73147
3.080	9655	UP	.154	.06896
3.615	13885312	SFB	.341	98.59258
8.191	41527	UU	.608	.29486
11.425	9259	BP	.399	.06574
12.942	8524	PU	.831	.06052

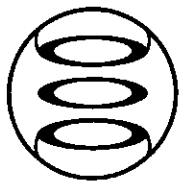
TOTAL AREA=1.4084E+07  
MUL FACTOR=1.0000E+00

\*CAT. No. D-6660 DAUNORUBICIN, HCl DNR-101  
T. RUN # 1622 JAN 26, 2020 17:41:50  
START



TIMETABLE STOP

HPLC: C<sub>18</sub> Column, 4.6 mm x 30 cm  
Acetonitrile/Methanol/Water/Trifluoroacetic Acid 29/29/42/0.1  
2 mL/min  
UV<sub>254</sub> Detection



# LC Laboratories®

Cat. No. D-6660

**Daunorubicin, Hydrochloride Salt**

Lot DNR-101

>98%



- TLC: 60 Å silica gel plates with fluorescent indicator
- Develop with Chloroform/Methanol/ Formic Acid 70/30/4
- Visualize via UV fluorescence quenching
- Also visualize by exposure to iodine vapor