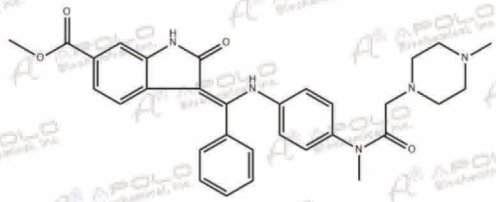
APOLO Biochemical, Inc.

CERTIFICATE OF ANALYSIS

Product Name: Nintedanib

Chemical Name: Methyl (Z)-3-[[[4-[N-methyl-2-(4-methylpiperazin-1-yl)acetamido]phenyl]amino](phenyl)methylene]-2-oxoindoline-6-carboxylate

Chemical Structure:



Lot Number:	AG00FBZI1110224
CAT Number:	APL-WCPN-0656247
CAS Registry Number:	656247-17-5
Manufacture Date:	02/2021
Expiry Date:	02/2024
Molecular Formula:	$C_{31}H_{33}N_5O_4$
Molecular Weight:	539.6248
Storage:	2-8 ˚C

Analysis Data

Item	Specification	Results
Appearance	Light green powder	Complies
HNMR	Consistent with the structure	Complies
Purity	≥ 99.00 %	99.00 %

The foregoing is a copy of the Certificate of Analysis as provided by our supplier

Jennifer LaBrecque 03/2022
Quality Assurance Manager

Conclusion: The above product meets the specifications of APOLO

APOLO Biochemical, Inc.
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Group Research Tech. Inc.
4F., No.297, Sec.3, Xinglong Rd., Zhubei City, Hsinchu County, 30274, Taiwan.
GRTI@apolo.com.tw / order.grti@gmail.com / order.abi@gmail.com
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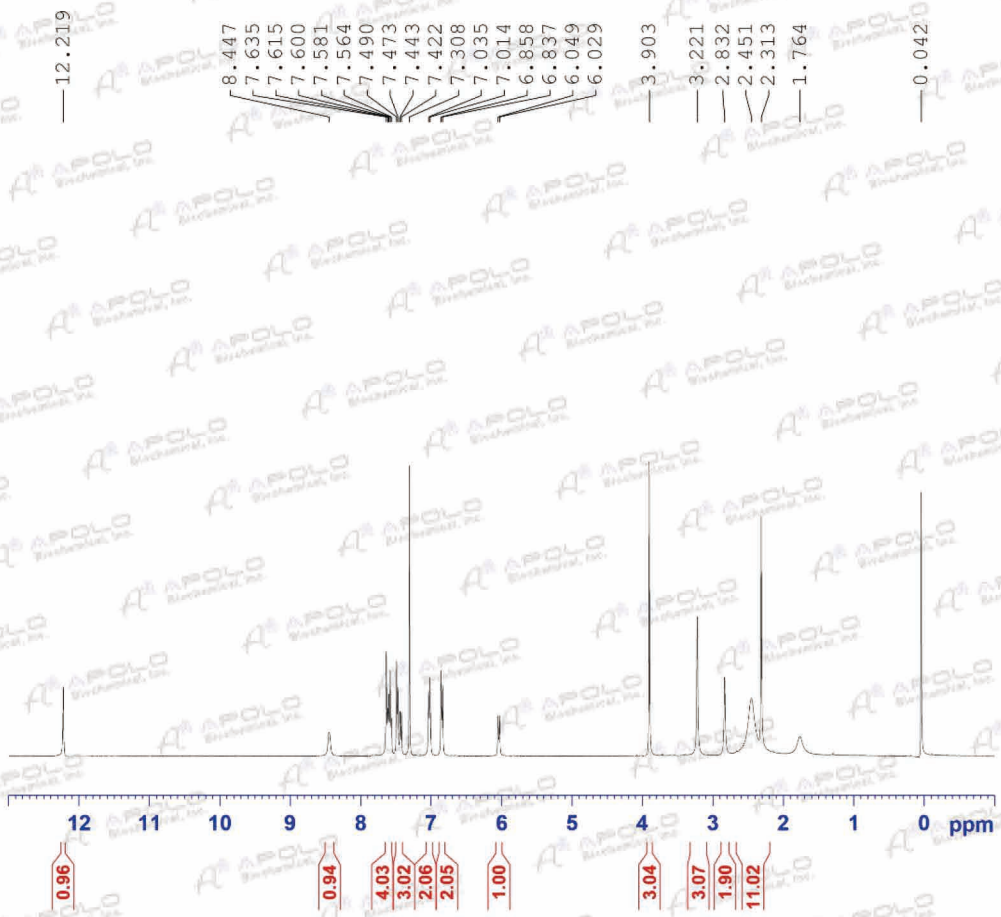
AZF20-258025-1 HNMR in CDCl3




```
Current Data Parameters
NAME      AZF20-258025-1
EXPNO                  8
PROCNO                 1

F2 - Acquisition Parameters
Date_           20210226
Time              14.07
INSTRUM    WNMR-I-400MHz
PULPROG           s1pu1
TD                38860
SOLVENT           CDCl3
NS                   32
DS                    0
SWH           9715.024 Hz
AQ          1.9999950 sec
RG                 67.6
DW              51.467 usec
DE              30.00 usec
TE                291.1 K
NUC1                1H
PL1           120.00 dB
SFO1       399.8316015 MHz

F2 - Processing parameters
SI                131072
SF         399.8277207 MHz
WDW                   EM
SSB      0
LB              0.50 Hz
GB                 0.1
PC                1.00
```

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Data File C:\CHEM32\1\DATA\20210226\ASP20-251283-1 2021-02-26 09-26-22\011-1601.D
Sample Name: AZF20-258025-1

```
==========================================================================
Acq. Operator   :                              Seq. Line :  16
Acq. Instrument : Instrument 1                  Location : Vial 11
Injection Date  : 2/26/2021 3:30:38 PM             Inj :   1
                                               Inj Volume : 5.0 µl
Different Inj Volume from Sequence !     Actual Inj Volume : 2.0 µl
Acq. Method     : C:\CHEM32\1\DATA\20210226\ASP20-251283-1 2021-02-26 09-26-22\NORMAL-TFA.M
Last changed    : 2/25/2021 10:50:14 AM
Analysis Method : C:\CHEM32\1\METHODS\20210225.M
Last changed    : 2/26/2021 3:56:52 PM
                  (modified after loading)
Additional Info : Peak(s) manually integrated
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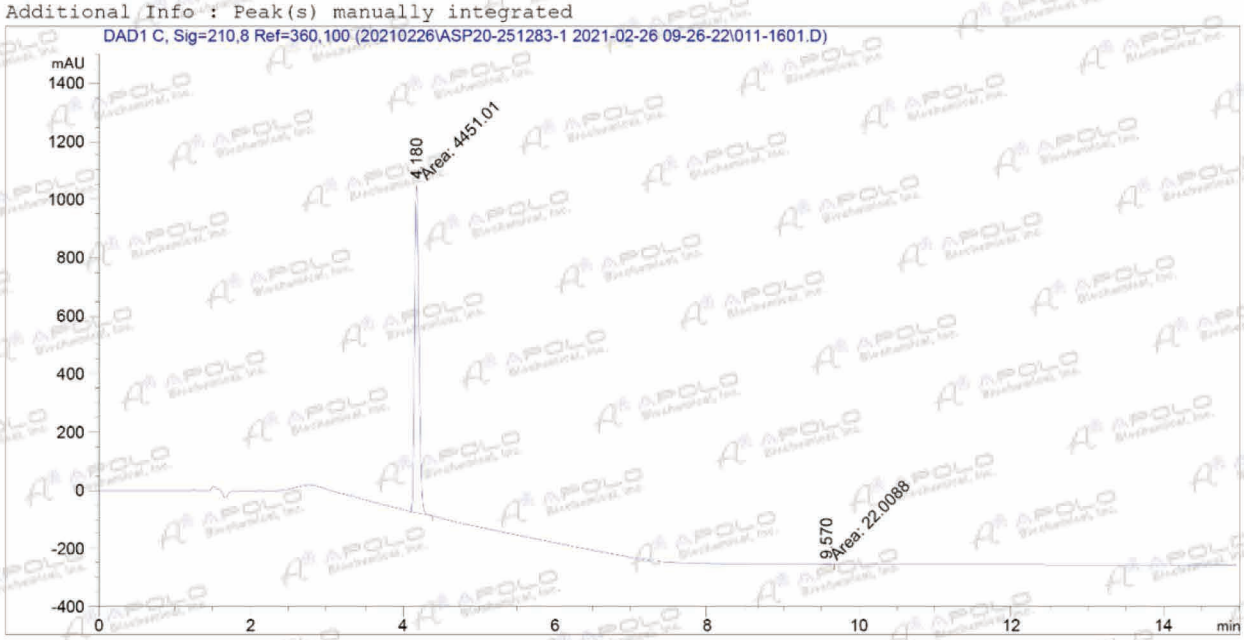



```
==========================================================================
                        Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier:                   :      1.0000
Dilution:                     :      1.0000
Use Multiplier & Dilution Factor with ISTDs


Signal 1: DAD1 C, Sig=210,8 Ref=360,100

Peak RetTime Type  Width     Area      Height     Area
  #   [min]        [min]   [mAU*s]     [mAU]       %
----|-------|----|-------|----------|----------|--------|
   1   4.180 MM    0.0656 4451.00684 1130.59973  99.5080
   2   9.570 MM    0.1251   22.00875    2.93294   0.4920

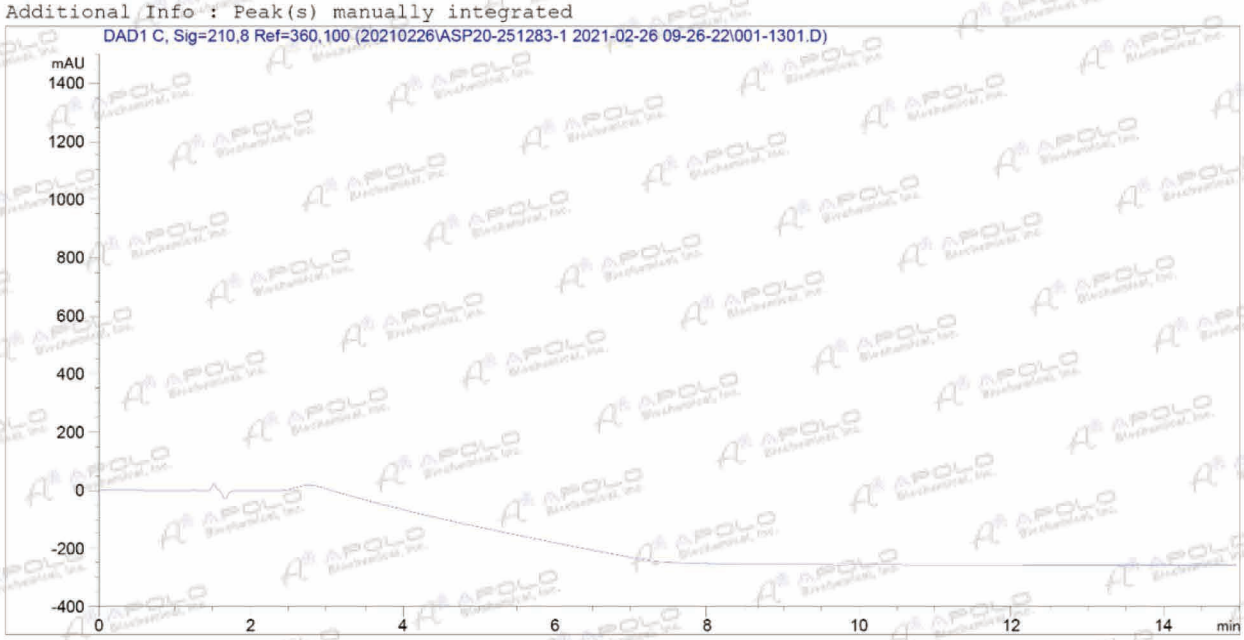
Totals :                  4473.01559 1133.53267

==========================================================================
                        *** End of Report ***

Instrument 1 2/26/2021 3:56:54 PM
```

Data File C:\CHEM32\1\DATA\20210226\ASP20-251283-1 2021-02-26 09-26-22\001-1301.D
Sample Name: BLANK

```
=====================================================================
Acq. Operator   :                          Seq. Line :  13
Acq. Instrument : Instrument 1              Location : Vial 1
Injection Date  : 2/26/2021 2:20:05 PM          Inj :   1
                                          Inj Volume : 5.0 µl
Different Inj Volume from Sequence !    Actual Inj Volume : 2.0 µl
Acq. Method     : C:\CHEM32\1\DATA\20210226\ASP20-251283-1 2021-02-26 09-26-22\NORMAL-TFA.M
Last changed    : 2/25/2021 10:50:14 AM
Analysis Method : C:\CHEM32\1\METHODS\20210225.M
Last changed    : 2/26/2021 3:56:52 PM
                  (modified after loading)
Additional Info : Peak(s) manually integrated
```




```
=====================================================================
                      Area Percent Report
=====================================================================

Sorted By             :      Signal
Multiplier:                  :      1.0000
Dilution:                    :      1.0000
Use Multiplier & Dilution Factor with ISTDs

No peaks found

=====================================================================
                      *** End of Report ***
```

Instrument 1 2/26/2021 3:57:29 PM