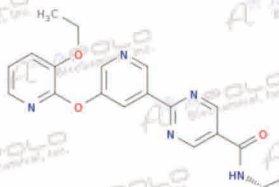


CERTIFICATE OF ANALYSIS

Product Name: 3-Bromo-1H-pyrazole

Chemical Structure:



Lot Number: ASP202650821

CAT Number: APL-1452180

CAS Registry Number: 14521-80-3

Manufacture Date: 11/2021

Expiry Date: 11/2023

Molecular Formula: C₈H₇BrN₂

Molecular Weight: 146.9700

Storage: 2-8°C

Analysis Data

Item	Specification	Results
Appearance	yellow crystal powder	Conforms
1 H NMR Spectrum	Consistent with structure	Conforms
Purity	≥ 98 %	98 %

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

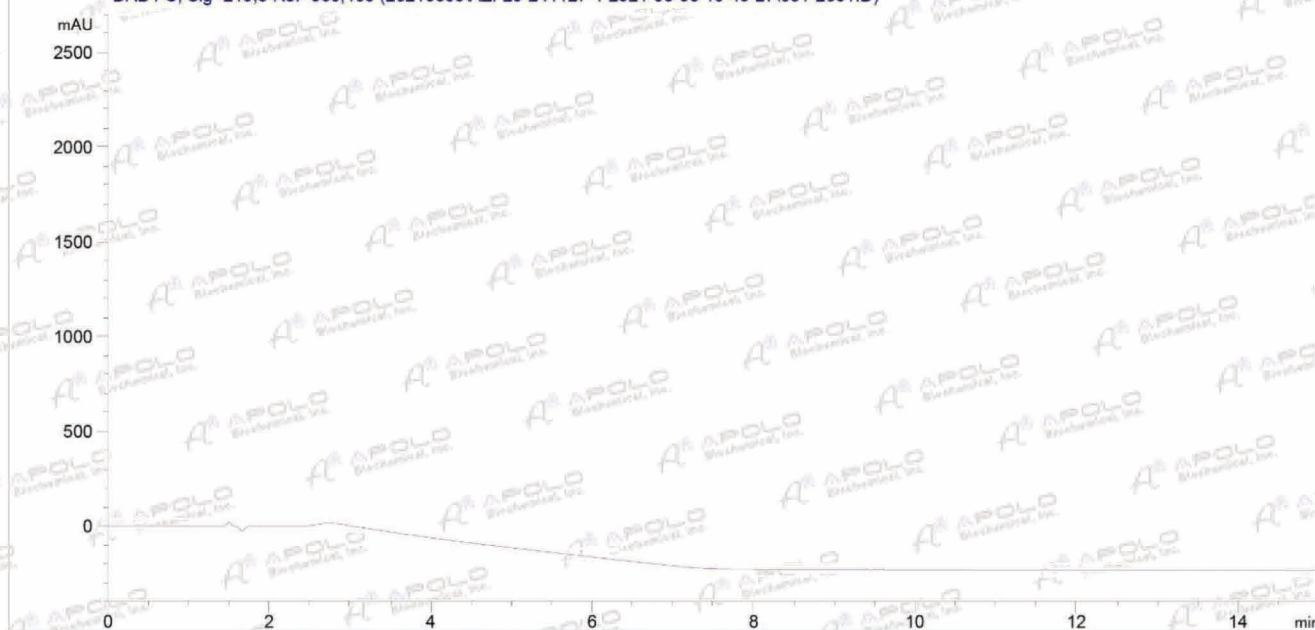
Jennifer LaBrecque 12/2021
Quality Assurance Manager

Conclusion: The above product meets the specifications of APOLO

=====

Acq. Operator : Instrument 1	Seq. Line : 20
Acq. Instrument : Instrument 1	Location : Vial 1
Injection Date : 3/8/2021 5:41:39 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\20210308\AZF20-241127-1	2021-03-08 10-49-27\NORMAL-TFA.M
Last changed : 2/25/2021 10:50:14 AM	
Analysis Method : C:\CHEM32\1\METHODS\20210225.M	
Last changed : 3/9/2021 9:07:00 AM	
	(modified after loading)
Additional Info : Peak(s) manually integrated	

DAD1 C, Sig=210,8 Ref=360,100 (20210308\AZF20-241127-1 2021-03-08 10-49-27\001-2001.D)



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

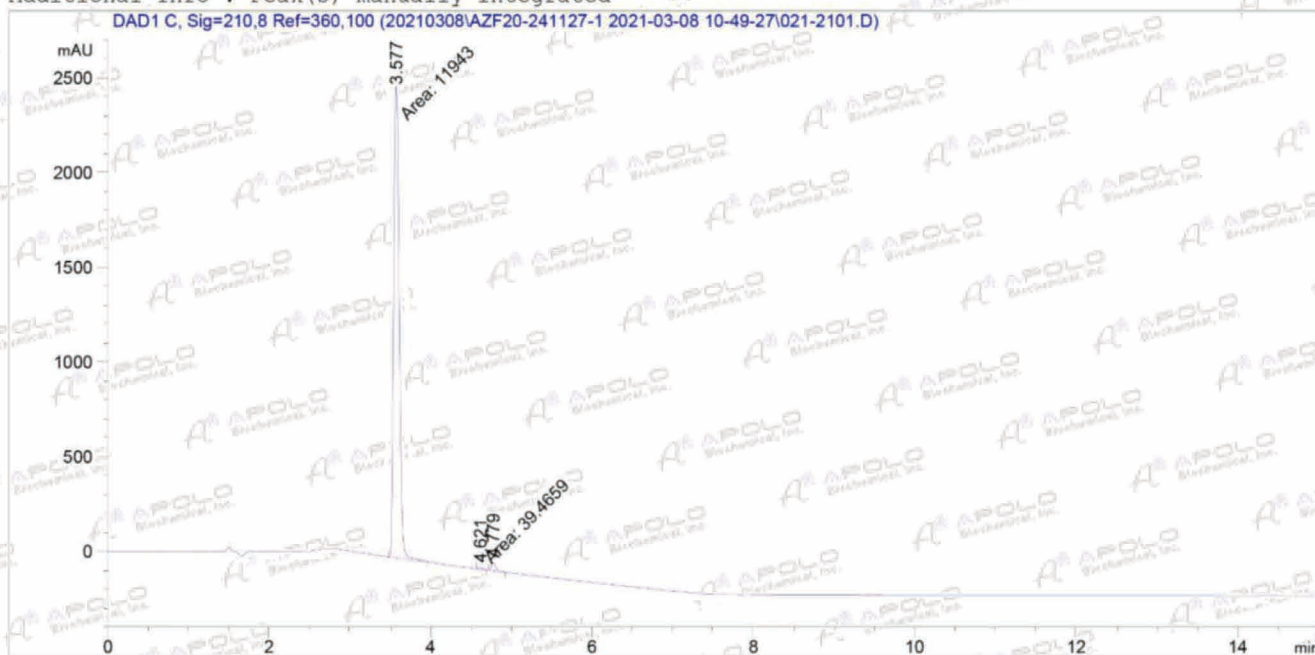
Sorted By : Signal
Multiplier: 1.0000
Dilution: 1.0000
Use Multiplier & Dilution Factor with ISTDs

No peaks found

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

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Acq. Operator : Instrument 1	Seq. Line : 21
Acq. Instrument : Instrument 1	Location : Vial 21
Injection Date : 3/9/2021 6:05:07 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\20210308\AZF20-241127-1	2021-03-08 10-49-27\NORMAL-TFA.M
Last changed : 2/25/2021 10:50:14 AM	
Analysis Method : C:\CHEM32\1\METHODS\20210225.M	
Last changed : 3/9/2021 9:07:00 AM	
(modified after loading)	
Additional Info : Peak(s) manually integrated	



Area Percent Report

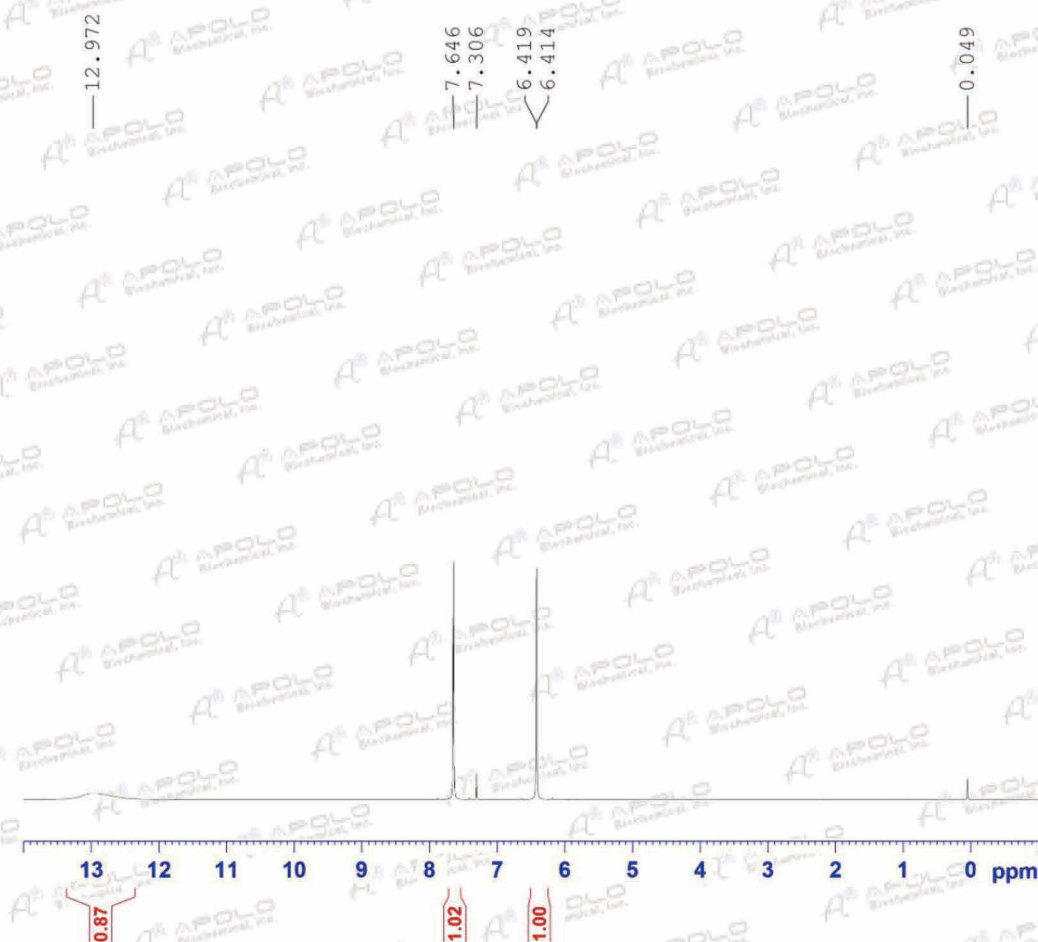
Sorted By : Signal
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

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

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	3.577	MM	0.0794	1.19430e4	2507.41772	98.2932
2	4.621	MM	0.0678	39.46591	9.70558	0.3248
3	4.779	BB	0.0577	167.91631	44.78383	1.3820

Totals : 1.21504e4 2561.90714

ASP20-265082-1 HNMR in CDC13



Current Data Parameters

NAME	ASP20-265082-1
EXPNO	18
PROCNO	1

F2 - Acquisition Parameters

Date_	20210309
Time	12.53
INSTRUM	WNMR-I-400MHz
PULPROG	zgpg30
TD	32768
SOLVENT	CDCl3
NS	32
DS	4
SWH	9715.024 Hz
AQ	1.9999950 sec
RG	59.8
DW	51.467 usec
DE	30.00 usec
TE	293.1 K
NUC1	1H
PL1	120.00 dB
SFO1	399.8316015 MHz

F2 - Processing parameters

SI	131072
SP	399.8277207 MHz
WDW	EM
SSB	0
LB	0.50 Hz
GB	0.1
PC	1.00