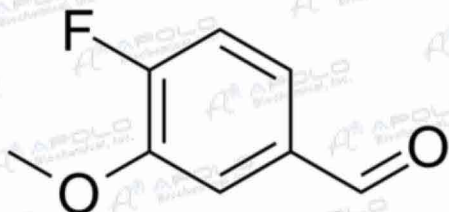


CERTIFICATE OF ANALYSIS

Product Name: 4-Fluoro-3-methoxybenzaldehyde

Chemical Structure:



Lot Number: 212930CSW018049

CAT Number: APL-1284954

CAS Registry Number: 128495-46-5

Manufacture Date: 07/2022

Expiry Date: 07/2024

Molecular Formula: C₈H₇FO₂

Molecular Weight: 154.14

Storage: 2-8°C

Analysis Data

Item	Specification	Results
Appearance	White to light yellow (Solid)	Conforms
1 H NMR Spectrum	Consistent with structure	Conforms
Purity (GC)	≥ 99.00 %	99.25 %

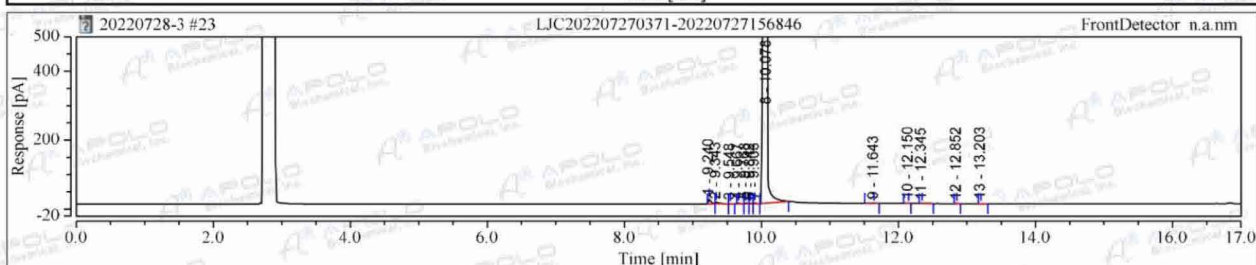
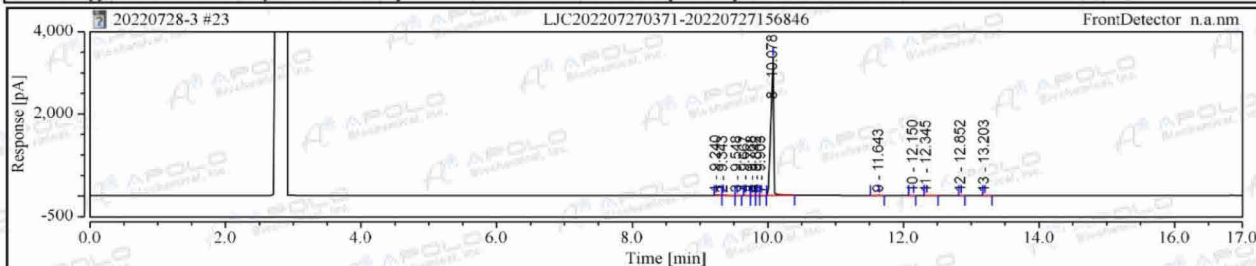
The foregoing is a copy of the Certificate of Analysis as provided by our supplier

Jennifer LaBrecque 08/2022
Quality Assurance Manager

Conclusion: The above product meets the specifications of APOLO

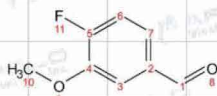
Chromatogram and Results

Sample ID: LJC202207270371-20220727156846 CAS NO.: 128495-46-5
 Batch No: 1019246 Channel: FrontDetector
 Vial Number: 19 Wavelength: n.a.
 Injection Type: Unknown Injection Volume: 1.00
 Instrument: GC10402 Injection Time: 29/07/2022 04:16
 Instrument Method: GC-FQ InstMeth.creation: 11/05/2020 11:09
 Processing Method: PM-LJC202207270371-20220727156846 Last update: 29/07/2022 10:14
 seq.creation_operator: Myangby
 chrom://ahy-cm7/CM7DATA/Leyan/GC10402/Sequence/2022/202207/20220728-3.seq/177.smp/FrontDetector.channel/FrontDetector.chm



No.	Retention Time min	Area pA*min	Height pA	Plates (USP)	Resolution (USP)	Asymmetry (USP)	Rel.Area %	Peak Name
1	9.240	0.510	13.697	592741	1.60	n.a.	0.334	
2	9.343	0.278	4.299	211933	2.68	n.a.	0.182	
3	9.548	0.027	0.593	282256	1.74	n.a.	0.018	
4	9.667	0.072	1.721	360041	1.59	2.15	0.047	
5	9.768	0.057	1.521	376416	1.30	n.a.	0.037	
6	9.842	0.036	1.203	642710	1.23	n.a.	0.024	
7	9.903	0.071	1.985	597657	2.73	n.a.	0.047	
8	10.078	151.757	3343.561	275779	24.76	0.60	99.256	
9	11.643	0.028	0.593	879219	9.55	0.73	0.018	
10	12.150	0.005	0.140	740895	3.29	0.71	0.004	
11	12.345	0.032	0.633	635301	9.26	2.85	0.021	
12	12.852	0.013	0.427	1173225	5.82	1.57	0.008	
13	13.203	0.008	0.125	517691	n.a.	1.97	0.005	
Total:		152.895	3370.497		65.54			

CAS NO. : 128495-46-5, CDCL₃



¹H NMR (400 MHz, Chloroform-d) δ 9.92 (d, J = 1.0 Hz, 1H), 7.52 (dt, J = 8.2, 1.3 Hz, 1H), 7.48 – 7.41 (m, 1H), 7.26 – 7.21 (m, 1H), 3.96 (d, J = 1.0 Hz, 3H).

