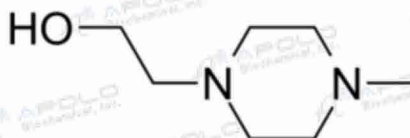


CERTIFICATE OF ANALYSIS

Product Name: 1-(2-Hydroxyethyl)-4-methylpiperazine

Chemical Structure:



Lot Number: 263478CSW003127

CAT Number: APL-5464120

CAS Registry Number: 5464-12-0

Manufacture Date: 07/2022

Expiry Date: 07/2024

Molecular Formula: C₇H₁₆N₂O

Molecular Weight: 144.21

Storage: RT

Analysis Data

Item	Specification	Results
Appearance	Colorless to light yellow (<39°C Solid, >41°C Liquid)	Conforms
¹ H NMR Spectrum	Consistent with structure	Conforms
Purity (GC)	≥ 99.00 %	99.69 %

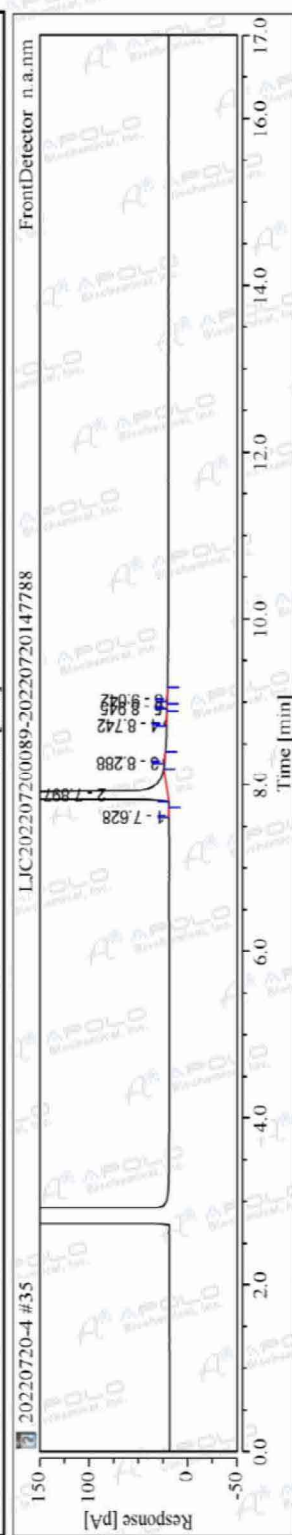
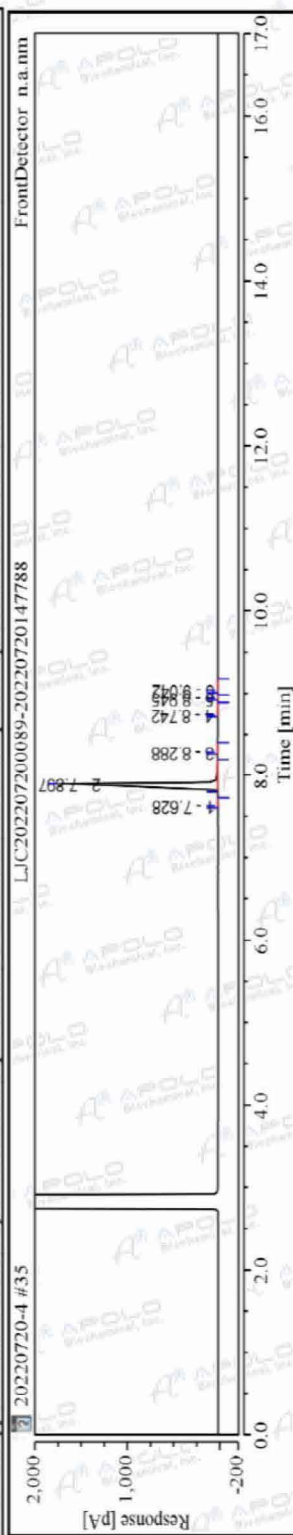
The foregoing is a copy of the Certificate of Analysis as provided by our supplier

Jennifer LaBrecque 08/2022
Quality Assurance Manager

Conclusion: The above product meets the specifications of APOLO

Chromatogram and Results

Sample ID: LJC202207200089-20220720147788
 CAS NO.: 5464-12-0
 Vial Number: 33
 Injection Type: Unknown
 Instrument: GC10402
 Processing Method: PM-LJC202207200089-20220720147788
 seq.creation_operator: Mynxp
 Comment: FrontDetector
 Channel: n.a.
 Wavelength: 1.00
 Injection Volume: 21/07/2022 08:02
 Injection Time: 11/05/2020 11:09
 InstMeth.creation_time: 21/07/2022 10:51
 Last update time: 21/07/2022 10:51
 chom://ahyy-cm7/CM7DATA/Leyan/GC10402/Sequence/2022/202207200089-20220720147788



No	Retention Time min	Area pA*min	Height pA	Plates (USP)	Resolution (USP)	Asymmetry (USP)	Rel.Area %	Peak Name
1	7.628	0.017	0.385	262029	3.65	2.54	0.020	
2	7.897	85.661	1714.788	130625	5.87	0.62	99.692	
3	8.288	0.066	1.932	516817	9.31	2.58	0.077	
4	8.742	0.146	3.508	465328	4.65	3.23	0.170	
5	8.945	0.011	0.492	975490	2.00	1.37	0.013	
6	9.042	0.024	0.445	360286	n.a.	3.08	0.028	
Total:		85.926	1721.549		25.48			

