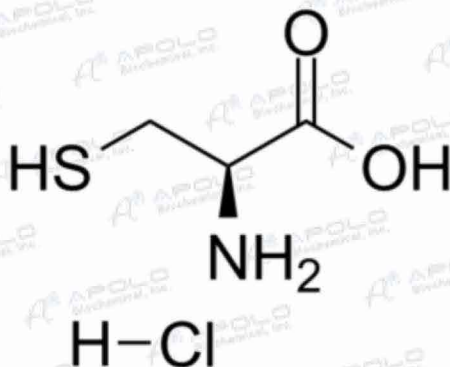


CERTIFICATE OF ANALYSIS

Product Name: L-Cysteine (hydrochloride)

Chemical Structure:



Lot Number: 228229CSW018517

CAT Number: APL-0052891

CAS Registry Number: 52-89-1

Manufacture Date: 10/2021

Expiry Date: 10/2023

Molecular Formula: C₃H₈NCINO₂S

Molecular Weight: 157.62

Target: Endogenous Metabolite

Pathway: Metabolic Enzyme/Protease

Solubility: H₂O: 100 mg/mL (634.44 mM);
Need ultrasonic)

Storage: 2-8°C

Analysis Data

Item	Specification	Results
Appearance	White to off-white (Solid)	Conforms
1 H NMR Spectrum	Consistent with structure	Conforms
Purity (NMR)	≥ 97.0 %	97.0 %

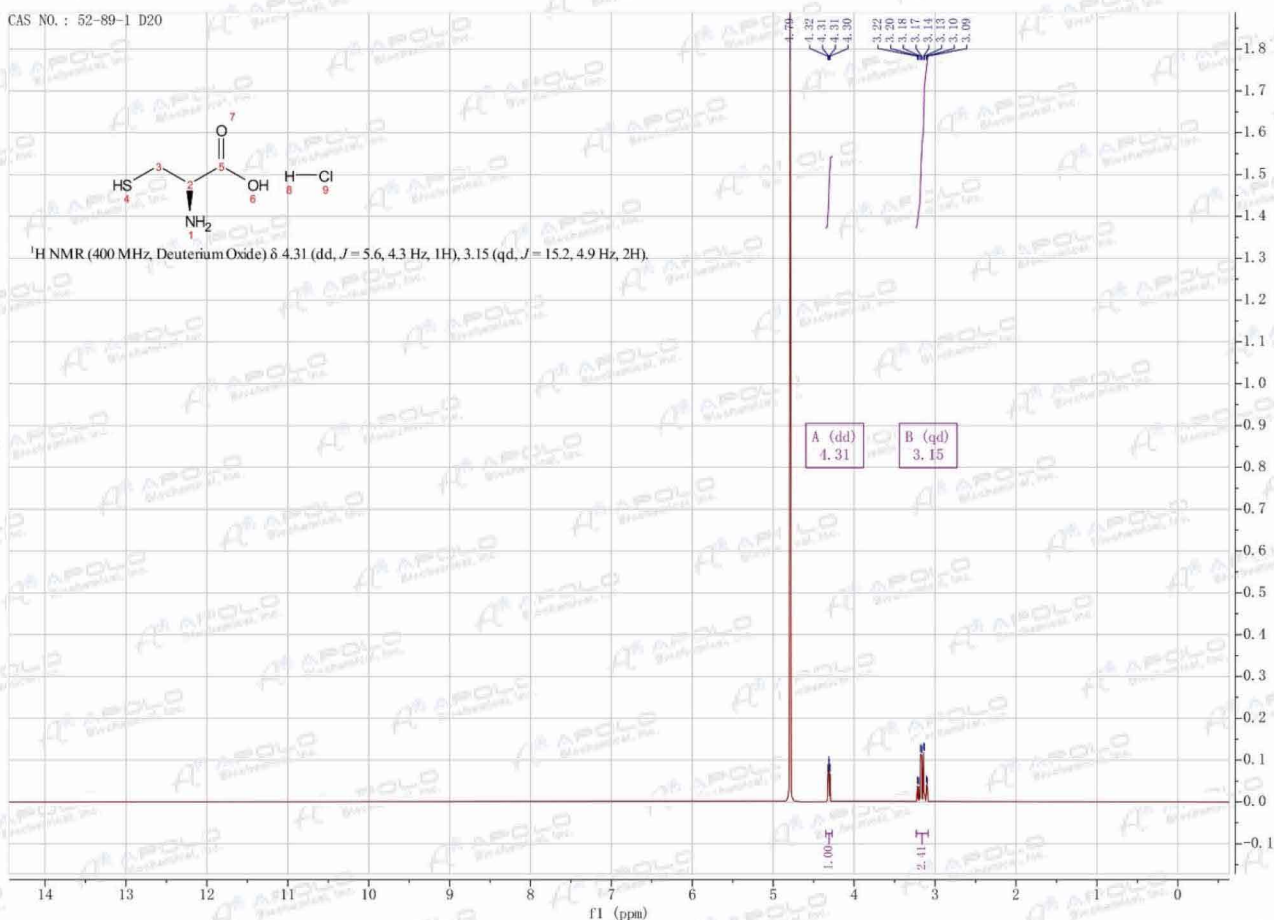
The foregoing is a copy of the Certificate of Analysis as provided by our supplier

Jennifer LaBrecque

Jennifer LaBrecque 10/2021
Quality Assurance Manager

Conclusion: The above product meets the specifications of APOLO

CAS NO. : 52-89-1 D20



Measurement Date : 8/10/2021

solvent : 1mol/L HCL

CAS NO.: 52-89-1

Set Temperature [TempTrol] : 20.0 °C

Time Delay : Disabled

n	Average		Std.Dev.	% RSD		Maximum		Minimum	
2	2.6407		0.1966	7.44		2.7797		2.5017	
S.No	Sample ID	Time	Result	Scale	OR °Arc	WLG.nm	Lg.mm	Conc.g/100ml	Temp.
1	LJC202108090161	12:59:08	2.7797	SR	0.020	589	100.00	0.71950	19.9 °C
2	LJC202108090161	12:59:15	2.5017	SR	0.018	589	100.00	0.71950	19.9 °C

Operator Name : Azhouyf Date : 8/10/2021 Signature : _____