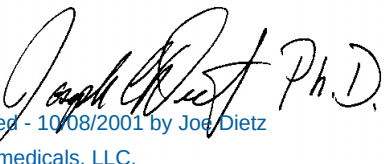


**MP Biomedicals, LLC**29525 Fountain Parkway
Solon, Ohio 44139Telephone: 440/337-1200
Toll Free: 800/854-0530Fax: 440/337-1180
web: www.mpbio.com

Certificate of Analysis

Product Description: N-Acetyl-L-Cysteine_**Catalog Number:** 100098_**Lot:** R8271_**Formula:** C₅H₉NO₃S**CAS #:** 616-91-1**Physical Description:** White Powder**Formula Weight:** 163.2**Storage:** +4°C

Test	Specification	Result
Identity Test	Passes	Passes
Purity	≥ 96%	99.86%
FTIR	Conforms to Standard	Conforms to Standard
Melting Point	105-115°C	107 - 113°C
Optical Rotation	+21.0° to +27.0°	+26.15°
Moisture	≤ 1.0%	0.13%
pH (1%aq.)	2.0-2.8	2.21


Approved - 10/08/2001 by Joe Dietz

MP Biomedicals, LLC.

Technical Director

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<mailto:biotech@mpbio.com><http://www.mpbio.com>

Online Ordering, MSDSs, certificates of analysis and data sheets now available on our web site

Technical Service: 1-800-279-5490 (440-337-1200) Customer Service: 1-800-854-0530 (440-337-1200)