



MP Biomedicals, LLC

29525 Fountain Parkway  
Solon, Ohio 44139

Telephone: 440/337-1200  
Toll Free: 800/854-0530  
Fax: 440/337-1180  
web: <http://www.mpbio.com>

## Certificate of Analysis

**Product Description:** 4-Hydroxy-L-proline  
**Catalog Number:** 102015  
**Lot:** QR10695

**Formula:** C<sub>5</sub>H<sub>9</sub>NO<sub>3</sub>  
**CAS #:** 51-35-4  
**Physical Description:** White Crystalline Powder

**Formula Weight:** 131.10  
**Storage:** Room Temperature

| Test  | Specification        | Results              |
|---|----------------------|----------------------|
| Identity Test                               | Passes               | Passes               |
| Melting Point                               | 270-280°C            | 271°C                |
| FTIR  | Conforms to Standard | Conforms to Standard |
| Optical Rotation<br>(c=4, H <sub>2</sub> O) | -74.0° to -77.0°     | -76.4°               |
| Water Content                               | ≤0.2%                | 0.13%                |

Ammonium: <0.020%  
Arsenic: <1 ppm  
Assay: 99.6%  
Chloride: <0.020%  
Iron: <10 ppm  
Residue on Ignition: 0.08%  
Sulfate: <0.020%  
Recommended Retest Date: 06/14/2016

06/16/2015 - John Huang, PhD  
MP Biomedicals, LLC.  
Senior QC Chemist

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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)