



**MP Biomedicals, LLC**

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## Certificate of Analysis

**Product Description:** L-Threonine Allo Free\_  
**Catalog Number:** 103053\_  
**Lot:** 9843KA\_

**Formula:** C<sub>4</sub>H<sub>9</sub>NO<sub>3</sub>  
**CAS #:** 72-19-5  
**Physical Description:** White Powder

**Formula Weight:** 119.12  
**Storage:** Room Temperature

Residue on ignition: 0.10%  
Chloride: <0.05%  
Sulfate: <0.03%  
Iron: <0.003%  
Heavy metals: <0.0015%  
Purity: 99.50%  
FTIR: Conforms to Standard  
pH (6% aq soln): 5.8  
Moisture: 0.15%  
Optical Rotation: -27.38°

03/10/2011 - Christina Marotta  
MP Biomedicals, LLC.  
Technical Director

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