



**MP Biomedicals, LLC**

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## Certificate of Analysis

**Product Description:** beta-Nicotinamide adenine dinucleotide, oxidized, free acid\_  
**Catalog Number:** 160047\_  
**Lot:** 1850A\_

**Formula:** C<sub>21</sub>H<sub>27</sub>N<sub>7</sub>O<sub>14</sub>P<sub>2</sub>  
**CAS #:** 53-84-9  
**Physical Description:** fine white powder

**Formula Weight:** 663.40  
**Storage:** 0 °C, desiccate

Test	Specification	Results
Purity	≥ 99%	99.6%
FTIR	Conforms to standard	Conforms to standard
pH	(1% aq.) 2- 4	2.78
Loss on drying	≤ 10 %	3.3%
Lambda max ( 1% aq.)	259 nm ± 3	259.4nm
OD 250/260	0.8± 0.15	0.85
OD 280/260	0.2 ± 0.15	<b>0.32</b>
OD 290/260	0.1 +/- 0.1	0.12

  
03/10/1998 - Joseph Dietz, Ph.D  
MP Biomedicals, LLC.  
Technical Director

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