

**Jiangxi Long Life Bio-Pharmaceutical Co., Ltd.**  
(A wholly owned subsidiary of Chiral Quest (Suzhou) Co., Ltd.)

## Certificate of Analysis

### 产品检验报告

Product Name 产品名称:	Boc-D-Serine	Date of Manufacturing 生产日期:	2016-07-27
CAS No.:	6368-20-3	Retest Date 复测日期:	2017-07-26
Batch No.批号:	L002-1-160715	Specification 质量标准:	In-house
Batch Size 批数量:	97.5 Kg		

No.	Test Items 测试项目	Specification 质量标准	Results 结果
1	Description 外观	White to off-white powder 白色至类白色粉末	Off-White powder 类白色粉末
2	Identification by IR 红外鉴别	Correspond to the reference spectrum 与对照光谱一致	Corresponds 一致
3	Loss on drying (%) 干燥失重	≤ 1.0%	0.12%
4	Related substances by HPLC (A%) 相关物质 (HPLC, A%) Purity 纯度 D-Serine D-丝氨酸 Any single unknown impurity 任一未知杂质	≥ 97.0% ≤ 0.5% ≤ 0.5%	99.2% 0.14% 0.25%
5	Boc-L-Serine by HPLC (A%) Boc-L-丝氨酸含量 (HPLC, A%)	≤ 0.5%	ND
6	Solvent Residue by GC 溶剂残留 (GC) -Toluene 甲苯 -Ethyl acetate 乙酸乙酯 -n-Heptane 正庚烷 -Tert-butanol 叔丁醇	≤ 890ppm ≤ 5000ppm ≤ 5000ppm ≤ 5000ppm	ND 557ppm 47ppm 43ppm
7	Solubility 溶解性 Water 水 Acetic acid 醋酸 Methanol 甲醇	Report results 报告结果 Report results 报告结果 Report results 报告结果	Freely soluble 易溶 Freely soluble 易溶 Slightly soluble 微溶
8	Assay by Titration 含量 (w/w %) (on dried basis 按干燥品计算)	97.0%~102.0%	99.2%

Conclusion: Batch released. The batch complies with the specification. I hereby certify that the above information is authentic and accurate.

结论: 批放行。本批产品符合规定的质量标准。特此证明以上信息真实准确。

Comment 备注 NA

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Certificate prepared by/Date 起草人/日期:

Certificate reviewed by/Date 审核人/日期:

Quality Control 质量控制

Certificate approved by/Date 批准人/日期:

Quality Assurance 质量保证



-----End of Certificate-----