

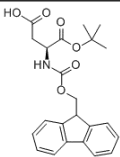


杭州泽尔瑞化学有限公司

HANGZHOU ZEERRUI CHEMICAL CO., LTD

## Certificate of analysis

COA No:ZER11911203

Product Name	Fmoc-Asp-OtBu
CAS No	129460-09-9
Molecular Formula	
Molecular Weight	C <sub>23</sub> H <sub>25</sub> N <sub>1</sub> O <sub>6</sub>
Manufacturing date	20190125
Batch No	ZERFAO20190125

Index Name	Specification	Result
Appearance	White powder	Conforms
Purity(HPLC)	98% min.	99.55%
TLC	98% min.	> 98%
Optical Purity	0.5% max D-enantiomer	0.2743%
Melting point	100-118°C	106.1-106.9°C
Specific Rotation $[\alpha]^{20}_D$	-23°±2.5° (C=1in DMF)	-23.1°
Loss on drying	2.0%max (50°C ,2h)	0.160%
Clarity of solution	0.3gram in 2ml DMF clear solution	Conforms
Water content(K.F.)	2.0%max	0.032%
Element analysis(C,H,N)	5.0%max	Conforms
IR Spectrum	In accordance with the structure	Conforms
Mass Spectrum	In accordance with the structure	Conforms
NMR Spectrum	In accordance with the structure	Conforms
Conclusion	Conforms to the standard of enterprise	

Storage:Cool dry place(≤25°C)

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CHECK: 叶明 叶明 INSPECTION:

