



Certificate of Analysis

Product Name:	Fmoc-Val-OH	Lot No:	22030	8-36001
CAS No:	68858-20-8	Store at:		≤25°C
Molecular Formula:	$C_{20}H_{21}NO_4$	Molecular We	ight:	339.38
Manufacturing Date:	08/03/22			

Tests	Specifications	Result
Appearance	White powder	Complies
Purity (HPLC)	≥99%	99.62%
Purity (TLC)	≥98%	>98%
Optical Purity	≤0.3% D-enantiomer	Not detectable
Melting Point	140-155°C	145.5-146.2°C
Specific Rotation $[\alpha]^{20}{}_D$	-16.5°±2°(C=1 in DMF)	-16.6°(C=1 in DMF)
Clarity of solution	0.3 gram in 2mL DMF clear solution	Complies
Water Content(K.F.)	≤1.0%	0.09%
Loss on drying	≤2.0%(60°C, 2h)	0.48%
IR Spectrum	In accordance with the structure	Complies
Mass Spectrum	In accordance with the structure	Complies
NMR Spectrum	In accordance with the structure	Complies

Signed:

Date: 04 April 2023

(Quality Assurance)

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