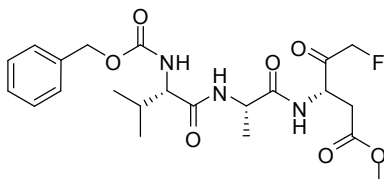


## Certificate of Analysis

**Axon Catalogue ID:** 2159 **Batch Number:** 1  
**Product Name:** Z-VAD-FMK  
**Alternative Name(s):** Z-VAD(Ome)-FMK  
**IUPAC Name:** (5S,8S,11S)-methyl 11-(2-fluoroacetyl)-5-isopropyl-8-methyl-3,6,9-trioxo-1-phenyl-2-oxa-4,7,10-triazatridecan-13-oate

**Structure:**



**Amount:**

**CAS number:** 187389-52-2  
**Batch Molecular Formula:** C<sub>22</sub>H<sub>30</sub>FN<sub>3</sub>O<sub>7</sub>·0.3H<sub>2</sub>O **Batch MW:** 472.89  
**Appearance:** White solid **Observed mp:** 165 - 167 °C  
**TLC (R<sub>f</sub>):** 0.36 DCM/MeOH (15:1)  
**Chemical Purity:** 98.2%  
**Optical Purity (ee):**  
**<sup>1</sup>H-NMR (300 MHz):** Analytical data confirm chemical structure  
**Mass Spec:** Analytical data confirm chemical structure  
**Microanalysis:** Calculated: C 55.88 , H 6.52 , N 8.89 Found: C 55.88 , H 6.40 , N 8.86  
**Storage Conditions:** Store at -20°C

Solubility Data:	Solvent	Solubility (mg/ml)	Solubility (mM)	Remarks
	Water	0.0	0.0	Insoluble
	0.1N NaOH (aq)			Not Tested
	0.1N HCl (aq)			Not Tested
	DMSO	46.7	>100 mM	
	EtOH			Not Tested

**Remarks:**

**QC Date:** 6-1-2014

The purity of Axon Ligands is confirmed by HPLC, MS, NMR and/or microanalysis. Analytical data are available upon request. Request can be submitted by e-mail to [info@axonmedchem.com](mailto:info@axonmedchem.com) indicating Catalogue ID and Batch number.

**Caution: Not fully tested. For research purposes only**