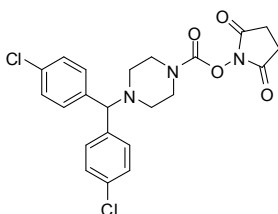




## Certificate of Analysis

**Axon Catalogue ID:** 2580 **Batch Number:** 1  
**Product Name:** MJN110  
**Alternative Name(s):** N.A.  
**IUPAC Name:** 2,5-dioxopyrrolidin-1-yl 4-(bis(4-chlorophenyl)methyl)piperazine-1-carboxylate

**Structure:**



**Amount:**

**CAS number(s):** 1438416-21-7  
**Molecular Formula:** C<sub>22</sub>H<sub>21</sub>Cl<sub>2</sub>N<sub>3</sub>O<sub>4</sub> **Molecular Weight:** 462.33  
**Batch Molecular Formula:** C<sub>22</sub>H<sub>21</sub>Cl<sub>2</sub>N<sub>3</sub>O<sub>4</sub> **Batch Molecular Weight:** 462.33  
**Appearance:** White solid **Observed mp:** 164 - 166 °C  
**TLC (R<sub>f</sub>):** 0.59 EtOAc/Hex (1:1)  
**Chemical Purity:** 98.8%  
**Optical Purity (ee):** N.A.  
**<sup>1</sup>H-NMR (300 MHz):** Analytical data confirm chemical structure  
**Mass Spec:** Analytical data confirm chemical structure  
**Microanalysis:** Calculated: C 57.15, H 4.58, N 9.09; Found: C 57.09, H 4.40, N 9.03  
**Storage Conditions:** Store at +4 °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	46.2	>100 mM	
	EtOH			Not Tested

**Remarks:**

**QC Date:** 30-06-2016

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**