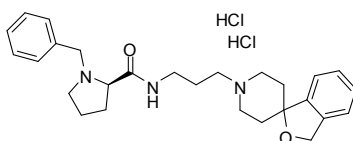




Certificate of Analysis

Axon Catalogue ID: 1784 **Batch Number:** 2
Product Name: BAN ORL 24
Alternative Name(s): N.A.
IUPAC Name: (R)-N-(3-(3H-spiro[isobenzofuran-1,4'-piperidine]-1'-yl)propyl)-1-benzylpyrrolidine-2-carboxamide dihydrochloride

Structure:



Amount:

CAS number(s): 475150-69-7 (parent), 1401463-54-4 (HCl salt (1:2))
Molecular Formula: C₂₇H₃₅N₃O₂.2HCl **Molecular Weight:** 506.51
Batch Molecular Formula: C₂₇H₃₅N₃O₂.2HCl.3H₂O **Batch Molecular Weight:** 560.55
Appearance: Off-white solid **Observed mp:** N.A.
TLC (R_f): 0.6 Hex/THF/NH₃ (1:1:0.1)
Chemical Purity: 99.3%
Optical Purity (ee): N.A.
¹H-NMR (300 MHz): Analytical data confirm chemical structure
Mass Spec: Analytical data confirm chemical structure
Microanalysis: Calculated: C 57.85, H 7.73, N 7.50; Found: C 57.63, H 7.64, N 7.35
Storage Conditions: Desiccate at -20 °C

Solubility Data:	Solvent	Solubility (mg/ml)	Solubility (mM)	Remarks
	Water	52.0	92.8	
	0.1N NaOH (aq)			Not Tested
	0.1N HCl (aq)			Not Tested
	DMSO	48.0	85.6	
	EtOH			Not Tested

Remarks: Upon standing at RT for a few days the material became an oil. Keep under nitrogen and keep cold.

QC Date: 15-02-2016

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 indicating Catalogue ID and Batch number.

Caution: Not fully tested. For research purposes only