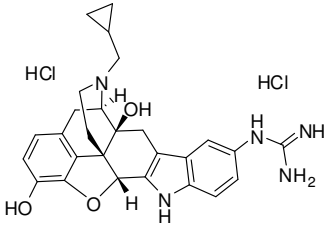


Certificate of Analysis

Axon Catalogue ID:	1226	Batch Number:	2
Product Name:	GNTI dihydrochloride		
Alternative Name(s):	N.A.		
IUPAC Name:	5'-Guanidinyl-17-(cyclopropylmethyl)-6,7-dehydro-4,5 α -epoxy-3,14-dihydroxy-6,7-2',3'-indolomorphinan dihydrochloride		
Structure:			Amount:
CAS number(s):	219655-56-8 (parent), 351183-88-5 (HCl salt (1:2))		
Molecular Formula:	C ₂₇ H ₂₉ N ₅ O ₃ .2HCl	Molecular Weight:	544.47
Batch Molecular Formula:	C ₂₇ H ₂₉ N ₅ O ₃ .2HCl.1.65H ₂ O	Batch Molecular Weight:	574.20
Appearance:	Off-white solid	Observed mp:	>270 °C (decomp)
TLC (R_f):	0.6	DCM/MeOH/NH ₃ (9:1:0.1)	
Chemical Purity:	98.7%		
Optical Purity (ee):	N.A.		
¹H-NMR (300 MHz):	Analytical data confirm chemical structure		
Mass Spec:	Analytical data confirm chemical structure		
Microanalysis:	Calculated: C 56.48, H 6.02, N 12.20; Found: C 56.14, H 5.54, N 11.93		
Storage Conditions:	Desiccate at -20 °C		
Solubility Data:	Solvent	Solubility (mg/ml)	Solubility (mM)
	Water	40.0	69.7
	0.1N NaOH (aq)		Not Tested
	0.1N HCl (aq)		Not Tested
	DMSO	48.0	83.6
	EtOH		Not Tested
Remarks:			
QC Date:	20-03-2018		

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