

# Certificate of Analysis



Product Identification		Chemical Structure
Catalog number	HB6124	
Compound name	Compound 21 dihydrochloride	
Chemical name	11-(1-Piperazinyl)-5H-dibenzo[b,e][1,4]diazepine dihydrochloride	
Batch number	E1321-6-1	
Batch molecular formula	C <sub>17</sub> H <sub>18</sub> N <sub>4</sub> ·2HCl·0.7H <sub>2</sub> O	
Batch molecular weight	363.89	
Method	QC requirement	QC Result
HPLC	Reverse Phase HPLC shows >98% purity	Meets specification: 99.5%
NMR	<sup>1</sup> H NMR in D <sub>2</sub> O at 400 MHz consistent with structure	Meets specification
Mass spectrum	Electrospray positive analysis consistent with structure	Meets specification
Microanalysis	Elemental analysis is within 0.4% for the batch molecular formula	Meets specification
TLC	TLC analysis in 4:1:1 AcOH:BuOH:water shows one spot under uv	Meets specification: R <sub>f</sub> =0.25
Physical appearance	Yellow to pale yellow solid	Meets specification: Yellow solid
Solubility	Soluble in water (100 mM) and in DMSO (100 mM)	Meets specification

Produced by

Signature

Passed by

Signature

Date

14-10-20

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.