

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 | E2287-2-1 | |
| Batch molecular formula | C ₁₇ H ₁₈ N ₄ ·2HCl·0.8H ₂ O | |
| Batch molecular weight | 365.69 | |
| Method | QC requirement | QC Result |
| HPLC | Reverse Phase HPLC shows >98% purity | Meets specification: 99.5% |
| NMR | ¹ H NMR in D ₂ 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 _f =0.25 |
| Physical appearance | Yellow to pale green 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

18/10/2023

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