Certificate of Analysis



| Product Identification | 1 | Chemical Structure |
|-------------------------|--|--------------------|
| Catalog number | HB2070 | |
| Compound name | Varenicline tartrate | A A N |
| Chemical name | 7,8,9,10-Tetrahydro-6,10-methano-6H-pyrazino[2,3-h][3]benzazepine tartrate | HN C4H608 |
| Batch number | E1202-1-1 | |
| Batch molecular formula | C ₁₃ H ₁₃ N ₃ .C ₄ H ₆ O ₆ | |
| Batch molecular weight | 361.35 | |
| Method | QC requirement | QC Result |

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|---------------------|---|----------------------------------|--|
| HPLC | Reverse Phase HPLC shows >98% purity | Meets specification: 99.3% | |
| NMR | 1H NMR in DMSO 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 | |
| Physical appearance | White to off-white solid | Meets specification: White solid | |
| Solubility | Soluble in water (100 mM) and in DMSO (50 mM) | Meets specification | |

| Produced by | Signature | Roman |
|-------------|-----------|----------|
| Passed by | Signature | Hum De |
| | Date | 17-10-19 |

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