

Certificate of Analysis



Product Identification		Chemical Structure
Catalog number	HB0004	 <chem>C16H19N.C4H4O4</chem>
Compound name	(+)-MK 801 maleate	
Chemical name	(5S,10R)-(+)-5-Methyl-10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5,10-imine maleate	
Batch number	E0745-5-2	
Batch molecular formula	$C_{16}H_{19}N.C_4H_4O_4 \cdot 0.1H_2O$	
Batch molecular weight	339.18	

Method	QC requirement	QC Result
HPLC	Reverse Phase HPLC shows >98% purity as two	Meets specification: 100%
NMR	¹ H 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
Optical rotation	Specific rotation in methanol measured between +108° and +128°	Meets specification: $[\alpha]_D = +111^\circ$ (c=1, MeOH)
TLC	TLC analysis in 5% MeOH/DCM shows one spot under uv	Meets specification: $R_f = 0.20$
Physical appearance	White to off-white solid	Meets specification: White solid
Solubility	Soluble in water (25 mM) and in DMSO (100 mM)	Meets specification

Produced by

Signature

Passed by

Signature

Date

13-04-18

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