

Certificate of Analysis

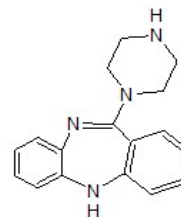


Product Identification

Catalog number HB4888
Compound name Compound 21 (DREADD agonist 21)
Chemical name 11-(1-Piperazinyl)-5H-dibenzo[b,e][1,4]diazepine

Batch number E0640-9-10
Batch molecular formula C₁₇H₁₈N₄·0.2H₂O
Batch molecular weight 281.96

Chemical Structure



Method	QC requirement	QC Result
HPLC	Reverse Phase HPLC shows >99% purity	Meets specification: 99.3%
NMR	¹ H NMR in CDCl ₃ at 400 MHz consistent with structure	Meets specification
Mass spectrum	MALDI analysis consistent with structure	Meets specification
Microanalysis	Elemental analysis is within 0.4% for the batch molecular formula	Meets specification
TLC	TLC analysis in 10% MeOH/DCM shows one spot under UV	Meets specification: R _f =0.3
Physical appearance	Yellow solid	Meets specification: Yellow solid
Solubility	Soluble in DMSO (100 mM) and in ethanol (100 mM)	Meets specification

Biological validation

Produced by

Signature

Passed by

Signature

Date

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