

# Certificate of Analysis



Product Identification		Chemical Structure
Catalog number	HB4199	
Compound name	Gemcitabine hydrochloride	
Chemical name	(+)-2'-Deoxy-2',2'-difluorocytidine hydrochloride	
Batch number	E1359-1-1	
Batch molecular formula	$C_9H_{11}F_2N_3O_4 \cdot HCl$	
Batch molecular weight	299.66	
Method	QC requirement	QC Result
HPLC	Reverse Phase HPLC shows >98% purity	Meets specification: 100%
NMR	$^1H$ NMR in $D_2O$ 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 50% PAW/BuOH shows one spot under uv	Meets specification: $R_f=0.6$
Physical appearance	White to off-white solid	Meets specification: White solid
Solubility	Soluble in water (100 mM) and in DMSO (20 mM)	Meets specification

Produced by

Signature

Passed by

Signature

Date

30-06-20

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