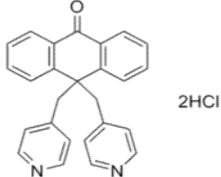


# Certificate of Analysis



Product Identification		Chemical Structure
<b>Catalog number</b>	HB1090	
<b>Compound name</b>	XE991 dihydrochloride	
<b>Chemical name</b>	10,10-bis(4-Pyridinylmethyl)-9(10H)-anthracenone dihydrochloride	
<b>Batch number</b>	E0736-1-2	
<b>Batch molecular formula</b>	$C_{26}H_{20}N_2O \cdot 2HCl \cdot 0.1H_2O$	
<b>Batch molecular weight</b>	451.18	
Method	QC requirement	QC Result
<b>HPLC</b>	Reverse Phase HPLC shows >98% purity	Meets specification: 99.6%
<b>NMR</b>	$^1H$ NMR in $D_2O$ at 400 MHz consistent with structure	Meets specification
<b>Mass spectrum</b>	Electrospray positive analysis consistent with structure	Meets specification
<b>Microanalysis</b>	Elemental analysis is within 0.4% for the batch molecular formula	Meets specification
<b>TLC</b>	TLC analysis in 5% MeOH/DCM shows one spot under uv	Meets specification: $R_f=0.1$
<b>Physical appearance</b>	White to off-white solid	Meets specification: Off-white solid
<b>Solubility</b>	Soluble in water (100 mM)	Meets specification

Produced by

Signature

Passed by

Signature

Date

06-04-18

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