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Print Date: Aug 23rd 2021

Certificate of Analysis

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Product Name: **Elacridar hydrochloride** **Catalog No.: 4646** **Batch No.: 2**

CAS Number: 143851-98-3

IUPAC Name: *N*-[4-[2-(3,4-Dihydro-6,7-dimethoxy-2(1*H*)-isoquinolinyl)ethyl]phenyl]-9,10-dihydro-5-methoxy-9-oxo-4-acridinecarboxamide hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{34}H_{33}N_3O_5.HCl.½H_2O$

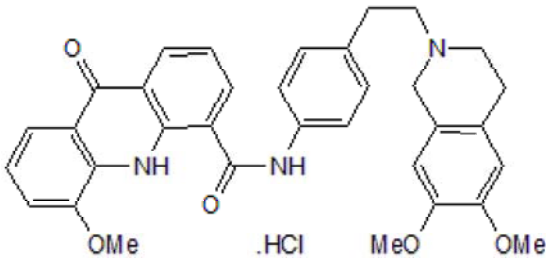
Batch Molecular Weight: 609.11

Physical Appearance: Yellow solid

Solubility: DMSO to 20 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows >98.7% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	67.04	5.79	6.9
Found	66.84	5.91	6.76

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Product Information

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Description:

Elacridar hydrochloride is a P-glycoprotein (P-gp/ABCB1) and breast cancer resistance protein (BCRP/ABCG2) inhibitor. Elacridar hydrochloride blocks P-gp-mediated multidrug resistance (MDR) of the cytotoxic drugs doxorubicin (Cat. No. 2252) and vincristine (Cat. No. 1257) in CHRC5 cells. Orally active.

Physical and Chemical Properties:

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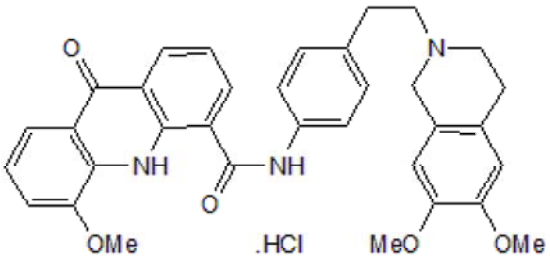
Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 20 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

Licensing Information:

Sold for research purposes under agreement from GlaxoSmithKline.

References:

Durmus *et al* (2012) Oral availability and brain penetration of the B-RAFV600E inhibitor vemurafenib can be enhanced by the P-GLYCOprotein (ABCB1) and breast cancer resistance protein (ABCG2) inhibitor elacridar. Mol.Pharm. ***9*** 3236. PMID: 23020847.

Myer *et al* (1999) The chemosensitizing potential of GF120918 is independent of the magnitude of P-glycoprotein-mediated resistance to conventional chemotherapeutic agents in a small cell lung cancer line. Oncol Rep. ***6*** 217. PMID: 9864431.

Hyafil *et al* (1993) *In vitro* and *in vivo* reversal of multidrug resistance by GF120918, an acridonecarboxamide derivative. Cancer Res. ***53*** 4595. PMID: 8402633.