Certificate of Analysis

Product Name: **MPC 6827 hydrochloride** **Catalog No.: 5231** **Batch No.: 1**

CAS Number: 917369-31-4

IUPAC Name: *N*-(4-Methoxyphenyl)-*N*,2-dimethyl-4-quinazolinamine hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{17}H_{17}N_3O.HCl$

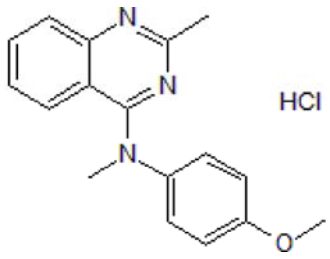
Batch Molecular Weight: 315.8

Physical Appearance: Yellow solid

Solubility: water to 100 mM
DMSO to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.1% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	64.66	5.74	13.31
Found	64.48	5.79	13.33

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel:+1 612 379 2956

Product Name: **MPC 6827 hydrochloride** **Catalog No.: 5231** **Batch No.: 1**

CAS Number: 917369-31-4

IUPAC Name: *N*-(4-Methoxyphenyl)-*N*,2-dimethyl-4-quinazolinamine hydrochloride

Description:

Potent inhibitor of microtubule formation (IC_{50} = 1.5 - 3.4 nM); inhibits polymerization of tubulin in vitro and disrupts microtubule formation in several cancer cell lines. Inhibits tumor growth in vitro and in vivo; exhibits pro-apoptotic characteristics. Brain penetrant.

Physical and Chemical Properties:

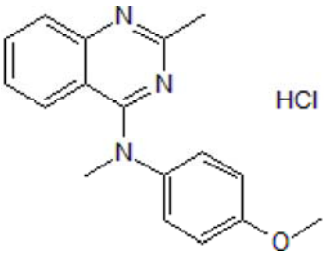
Batch Molecular Formula: $C_{17}H_{17}N_3O.HCl$

Batch Molecular Weight: 315.8

Physical Appearance: Yellow solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Desiccate at RT

Solubility & Usage Info:

water to 100 mM
DMSO to 100 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.

References:

Mahal *et al* (2014) Effects of the tumor-vasculature-disrupting agent verubulin and two heteroaryl analogues on cancer cells, endothelial cells, and blood vessels. ChemMedChem. ***9*** 847. PMID: 24678059.

Sirisoma *et al* (2009) Discovery of N-(4-methoxyphenyl)-N,2-dimethylquinazolin-4-amine, a potent apoptosis inducer and efficacious anticancer agent with high blood brain barrier penetration. J.Med.Chem. ***52*** 2341. PMID: 19296653.

Kasibhatla *et al* (2007) MPC-6827: a small-molecule inhibitor of microtubule formation that is not a substrate for multidrug resistance pumps. Cancer Res. ***67*** 5865. PMID: 17575155 .