

Certificate of Analysis

www.tocris.com

Product Name: FK 866 hydrochloride

Catalog No.: 4808

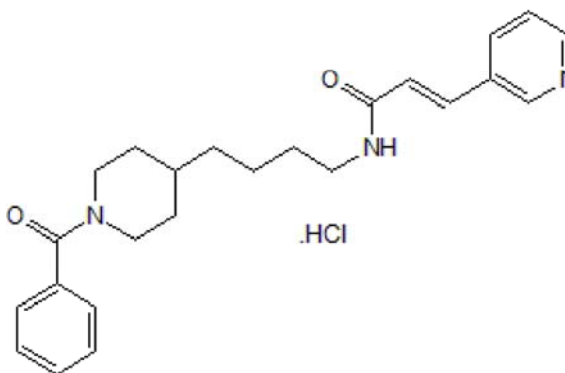
Batch No.: 2

CAS Number: 2727965-45-7

IUPAC Name: 2-(*E*)-*N*-[4-(1-Benzoyl-4-piperidiny)butyl]-3-(3-pyridinyl)-2-propenamide hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₄H₂₉N₃O₂.HCl.¼H₂O
Batch Molecular Weight: 432.47
Physical Appearance: Off-white solid
Solubility: water to 5 mM with gentle warming
DMSO to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.44 (Dichloromethane:Methanol [9:1])
HPLC: Shows >99.9% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon Hydrogen Nitrogen		
Theoretical	66.65	7.11	9.72
Found	66.75	7.32	9.73

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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: FK 866 hydrochloride

Catalog No.: 4808

2

CAS Number: 2727965-45-7

IUPAC Name: 2-(E)-N-[4-(1-Benzoyl-4-piperidiny)butyl]-3-(3-pyridinyl)-2-propenamide hydrochloride

Description:

FK 866 hydrochloride is a non-competitive and potent inhibitor of NAMPT (nicotinamide phosphoribosyltransferase, PBEF1) ($K_i = 0.3$ nM); inhibits NAD biosynthesis. Induces delayed cell death by apoptosis in HepG2 human liver carcinoma cells ($IC_{50} \sim 1$ nM). Induces apoptosis in four different neuroblastoma cell lines; also induces autophagy in SH-SY5Y cells. Potentiates the cytotoxic effects induced by etoposide (Cat. No. 1226) and cisplatin (Cat. No. 2251).

Physical and Chemical Properties:

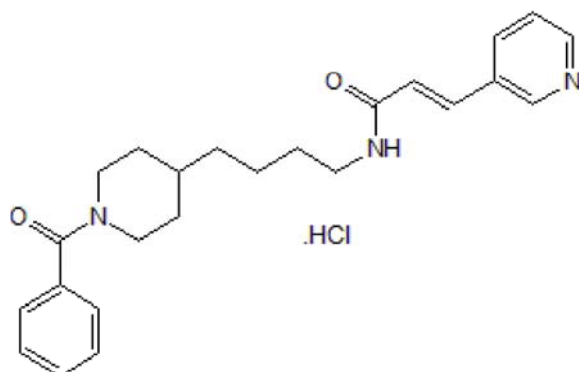
Batch Molecular Formula: $C_{24}H_{29}N_3O_2 \cdot HCl \cdot \frac{1}{4}H_2O$

Batch Molecular Weight: 432.47

Physical Appearance: Off-white solid

Minimum Purity: $\geq 98\%$

Batch Molecular Structure:



Storage: Store at $-20^{\circ}C$. This product is packaged under an inert atmosphere.

Solubility & Usage Info:

water to 5 mM with gentle warming
DMSO to 100 mM

Standard retail vials are prepared by lyophilisation. The product may appear as a solid, a gel or a film. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a $45-60^{\circ}C$ 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 $-20^{\circ}C$ or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Travelli et al (2011) Reciprocal potentiation of the antitumoral activities of FK866, an inhibitor of nicotinamide phosphoribosyltransferase, and etop. or cisp. in neuroblastoma cells. *J.Pharmacol.Exp.Ther.* **338** 829. PMID: 21685314.

Galli et al (2008) Synthesis and biological evaluation of isosteric analogues of FK866, an inhibitor of NAD salvage. *ChemMedChem* **3** 771. PMID: 18247435.

Hasmann et al (2003) FK866, a highly specific noncompetitive inhibitor of nicotinamide phosphoribosyltransferase, represents a novel mechanism for induction of tumor cell apoptosis. *Cancer Res.* **63** 7436. PMID: 14612543.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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