



Certificate of Analysis

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Product Name: FK 866 Catalog No.: 8072 Batch No.: 1

CAS Number: 658084-64-1

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

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{24}H_{29}N_3O_2$. $\frac{1}{2}H_2O$

Batch Molecular Weight: 400.52

Physical Appearance: Pale yellow solid

Solubility: DMSO to 100 mM ethanol to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.5% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 71.97 7.55 10.49 Found 71.09 7.15 10.38

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Product Information

Print Date: Mar 13th 2024

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CAS Number: 658084-64-1

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

Description:

FK 866 is a non-competitive and high-affinity inhibitor of NAMPT (nicotinamide phosphoribosyltransferase, PBEF1) ($K_i = 0.3 \text{ nM}$); inhibits NAD biosynthesis. Induces delayed cell death by apoptosis in HepG2 human liver carcinoma cells ($IC_{50} \sim 1 \text{ nM}$). 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: C24H29N3O2.1/2H2O

Batch Molecular Weight: 400.52

Physical Appearance: Pale yellow solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at -20°C. This product is packaged under an inert atmosphere.

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

DMSO to 100 mM ethanol 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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

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. Chem.Med.Chem. **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