

Print Date: Jan 15th 2016

Certificate of Analysis

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Product Name: Ivachtin Catalog No.: 2636 Batch No.: 1

CAS Number: 745046-84-8

IUPAC Name: 2-[4-Methyl-8-(morpholin-4-ylsulfonyl)-1,3-dioxo-1,3-dihydro-2*H*-pyrrolo[3,4-*c*]quinolin-2-yl]ethyl acetate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{20}H_{21}N_3O_7S$

Batch Molecular Weight: 447.46 **Physical Appearance:** Tan solid

Solubility: DMSO to 10 mM
Storage: Desiccate at +4°C

Batch Molecular Structure:

OAC

ONS

OH

CH3

C₂₀H₂₁N₃O₇S Mol. Wt.: 447.46

2. ANALYTICAL DATA

TLC: $R_f = 0.82$ (Dichloromethane:Methanol [9:1])

Melting Point:

HPLC:

Shows >99.9% purity

HNMR:

Consistent with structure

Mass Spectrum:

Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 53.68 4.73 9.39 Found 53.7 4.72 9.33



Product Information

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Description:

Potent, reversible inhibitor of caspase-3 ($IC_{50} = 23$ nM) that displays moderate selectivity over other caspases. Exhibits antiapoptotic activity in human Jurkat T cells treated with staurosporine; exhibits a higher level of protection than Z-VAD-FMK (Cat. No. 2163).

Physical and Chemical Properties:

Batch Molecular Formula: C₂₀H₂₁N₃O₇S Batch Molecular Weight: 447.46 Physical Appearance: Tan solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Desiccate at +4°C

Solubility & Usage Info:

DMSO to 10 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:

Kravchenko et al (2005) Synthesis and structure-activity relationship of 4-substituted 2-(2-acetyloxyethyl)-8-(morpholine-4-sulfonyl) pyrrolo[3,4-c]quinoline-1,3-diones as potent caspase-3 inhibitors. J.Med.Chem. 48 3680. PMID: 15916416.

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