# TOCRIS a biotechne brand

# **Certificate of Analysis**

# www.tocris.com

## Product Name: Deltarasin

# Catalog No.: 5424 Batch No.: 1

CAS Number: 1440898-82-7

**IUPAC Name:** 

 $2 \left[ 4 \left[ (2S) 2 (2 \text{ Phonyl } 1H \text{ honzimidazol } 1) \right] \right]$ 

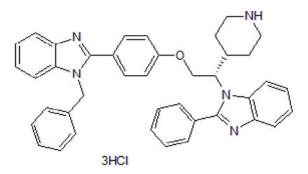
2-[4-[(2S)-2-(2-Phenyl-1*H*-benzimidazol-1-yl)-2-(4-piperidinyl)ethoxy]phenyl]-1-(phenylmethyl)-1*H*-benzimidazole trihydrochloride

# 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: Batch Molecular Weight: Physical Appearance: Solubility:  $C_{40}H_{37}N_5O.3HCI.4H_2O$ 785.2 White solid water to 100 mM DMSO to 100 mM Store at -20°C

# Storage:

**Batch Molecular Structure:** 



# 2. ANALYTICAL DATA

HPLC: Chiral HPLC: <sup>1</sup>H NMR: Mass Spectrum: Microanalysis:

Shows 99.7% purity Shows 100% purity Consistent with structure Consistent with structure Carbon Hydrogen Nitrogen Theoretical 61.19 6.16 8.92 Found 61.31 6.13 8.98

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

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#### Deltarasin Product Name:

# Catalog No.: 5424

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**IUPAC Name:** 

2-[4-[(2S)-2-(2-Phenyl-1H-benzimidazol-1-yl)-2-(4-piperidinyl)ethoxy]phenyl]-1-(phenylmethyl)-1H-benzimidazole trihydrochloride

## **Description:**

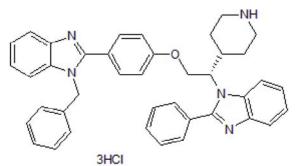
High affinity PDE $\delta$ -KRAS interaction inhibitor (K<sub>d</sub> = 41 nM); binds to PDEo. Reduces proliferation and induces cell death of KRASdependent Panc-Tu-1 and Capan-1 pancreatic cancer cells. Attenuates tumor growth of Panc-Tu-1 xenografts in mice.

### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>40</sub>H<sub>37</sub>N<sub>5</sub>O.3HCI.4H<sub>2</sub>O Batch Molecular Weight: 785.2 Physical Appearance: White solid

## Minimum Purity: >99%

## **Batch Molecular Structure:**



## Storage: Store at -20°C

## 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:**

Zimmermann et al (2014) Structure guided design and kinetic analysis of highly potent benzimidazole inhibitors targeting the PDE& prenyl binding site. J.Med.Chem. 57 5435. PMID: 24884780.

Zimmermann et al (2013) Small molecule inhibition of the KRAS-PDE<sup>(1)</sup> interaction impairs oncogenic KRAS signalling. Nature **497** 638. PMID: 23698361.

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