

# **Certificate of Analysis**

Print Date: Jul 20th 2020

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Product Name: Go 6976 Catalog No.: 2253 Batch No.: 9

CAS Number: 136194-77-9

IUPAC Name: 5,6,7,13-Tetrahydro-13-methyl-5-oxo-12*H*-indolo[2,3-a]pyrrolo[3,4-c]carbazole-12-propanenitrile

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{24}H_{18}N_4O$ Batch Molecular Weight: 378.43

Physical Appearance: Off-white solid
Solubility: DMSO to 10 mM
Storage: Store at -20°C

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

HPLC: Shows 97.6% purity

<sup>1</sup>H NMR: Consistent with structure

Mass Spectrum: Consistent with structure



## **Product Information**

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#### **Description:**

Potent protein kinase C (PKC) inhibitor (IC $_{50}$  = 7.9 nM). Discriminates between Ca $^{2+}$ -dependent and -independent isoforms of PKC in vitro; selectively inhibits PKC $\alpha$  and PKC $\beta$ 1 (IC $_{50}$  values are 2.3 and 6.2 nM respectively). Does not inhibit the activity of PKC $\delta$ , - $\epsilon$ , or - $\zeta$  (IC $_{50}$  > 3 $\mu$ M). Also inhibits TrkA, TrkB, JAK2 and JAK3 tyrosine kinases (IC $_{50}$  values are 5, 30, 130 and 370 nM respectively), PKC $\mu$  (PKD1) and the mitotic spindle checkpoint.

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

Batch Molecular Formula: C<sub>24</sub>H<sub>18</sub>N<sub>4</sub>O Batch Molecular Weight: 378.43 Physical Appearance: Off-white solid

**Minimum Purity**: ≥95%

#### **Batch Molecular Structure:**

Storage: Store at -20°C

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 10 mM

This product is supplied as a lyophilized solid and may be very hard to visualize. 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°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:

**Stolz** *et al* (2009) Pharmacologic abrogation of the mitotic spindle checkpoint by an indolocarbazole discovered by cellular screening efficiently kills cancer cells. Cancer Res. *69* 3874. PMID: 19366805.

**Grandage** *et al* (2006) Go6976 is a potent inhibitor of JAK2 and FLT3 tyrosine kinases with significant activity in primary acute myeloid leukaemia cells. Br.J.Haematol. *135* 303. PMID: 16956345.

**Behrens** et al (1999) Go 6976 is a potent inhibitor of neurotrophin-receptor intrinsic tyrosine kinase. J.Neurochem. **72** 919. PMID: 10037462.

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