

# **Certificate of Analysis**

Print Date: Mar 1st 2022

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**Product Name:** Y-26763 Catalog No.: 2076 Batch No.: 1

CAS Number: 127408-31-5

**IUPAC Name:** N-[(3S,4R)-6-Cyano-3,4-dihydro-3-hydroxy-2,2-dimethyl-2H-1-benzopyran-4-yl]-N-hydroxyacetamide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

 $C_{14}H_{16}N_2O_4$ **Batch Molecular Formula: Batch Molecular Weight:** 276.29

**Physical Appearance:** Pale pink solid

Solubility: 1eq. NaOH to 100 mM

> ethanol to 100 mM DMSO to 100 mM

Storage: Store at RT

**Batch Molecular Structure:** 

# 2. ANALYTICAL DATA

TLC:  $R_f = 0.3$  (Dichloromethane:Methanol [95:5])

HPLC: Shows 99.7% purity **Chiral HPLC:** Shows 99.7% purity

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

Microanalysis: Carbon Hydrogen Nitrogen

> Theoretical 60.86 5.84 10.14 Found 60.72 5.95 9.86

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



# **Product Information**

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#### **Description:**

Y-26763 is a  $K_{ir}$ 6 ( $K_{ATP}$ ) channel opener and active metabolite of Y-27152. Relaxes contracted rat aortic rings ( $IC_{50}$  = 0.027 mM) and inhibits glucose-induced insulin secretion in isolated human pancreatic β-cells in vitro. Produces hypotension in spontaneously hypertensive rats and displays cardioprotective properties in dogs following systemic administration in vivo.

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

Batch Molecular Formula: C<sub>14</sub>H<sub>16</sub>N<sub>2</sub>O<sub>4</sub> Batch Molecular Weight: 276.29 Physical Appearance: Pale pink solid

**Minimum Purity:** ≥98%

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

Storage: Store at RT

#### Solubility & Usage Info:

1eq. NaOH to 100 mM ethanol 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:

**Cosgrove** *et al* (2004) Y-26763: ATP-sensitive K+ channel activation and the inhibition of Ins release from human pancreatic β-cells Eur.J.Pharmacol. *486* 133. PMID: 14975702.

**Fukunari** *et al* (1997) Y-26763 protects the canine heart from a stunning injury through opening of the KATP channels Eur.J.Pharmacol. **323** 197. PMID: 9128839.

**Nakajima** *et al* (1992) Y-27152, a long-acting K<sup>+</sup> channel opener with less tachycardia: antihypertensive effects in hypertensive rats and dogs in conscious state. J.Pharmacol.Exp.Ther. **261** 730. PMID: 1578381.