



# **Certificate of Analysis**

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Product Name: NCX 466 Catalog No.: 4537 Batch No.: 1

CAS Number: 1262956-64-8

IUPAC Name:  $(\alpha S)$ -6-Methoxy- $\beta$ -methyl-2-naphthaleneacetic acid (5S)-5,6-bis(nitrooxy)hexyl ester

## 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{20}H_{24}N_2O_9$ Batch Molecular Weight: 436.41

Physical Appearance: Pale yellow oil

Solubility: DMSO to 100 mM ethanol to 100 mM

Storage: Store at -20°C

**Batch Molecular Structure:** 

ONO<sub>2</sub>

## 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.18$  (Ethyl acetate:Petroleum ether [2:3])

HPLC: Shows 99.6% purity

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

Mass Spectrum: Consistent with structure



## **Product Information**

Print Date: Jan 14th 2016

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## **Description:**

Cyclooxygenase (COX)-inhibiting nitric oxide (NO) donor (CINOD). Inhibits COX-1 and COX-2 while releasing NO. Demonstrates higher efficacy than naproxen, its congener drug, in reducing levels of profibrotic cytokine transforming growth factor- $\beta$  and oxidative stress in a mouse model of bleomycininduced lung fibrosis. Orally available.

## **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>9</sub> Batch Molecular Weight: 436.41 Physical Appearance: Pale yellow oil

Minimum Purity: >98%

#### **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 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. 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:

**Pini** et al (2012) Prevention of bleomycin-induced lung fibrosis in mice by a novel approach of parallel inhibition of cyclooxygenase and nitric-oxide donation using NCX 466, a prototype cyclooxygenase inhibitor and nitric-oxide donor. J.Pharmacol.Exp.Ther. **341** 493. PMID: 22344408.