# **Certificate of Analysis**

#### www.tocris.com

#### RCM 1 Product Name:

Catalog No.: 6845 Batch No.: 1

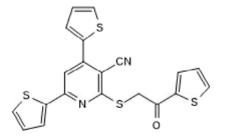
CAS Number: IUPAC Name: 339163-65-4 2-[[2-Oxo-2-(2-thienyl)ethyl]thio]-4,6-di-2-thienyl-3-pyridinecarbonitrile

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula: Batch Molecular Weight:** Physical Appearance: Solubility: Storage:

**Batch Molecular Structure:** 

 $C_{20}H_{12}N_2OS_4$ 424.58 Off White solid DMSO to 20 mM Store at -20°C



#### 2. ANALYTICAL DATA

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

Shows 99.4% purity Consistent with structure Consistent with structure

	Carbon Hydrogen Nitrogen				
Theoretical	56.58	2.85	6.6		
Found	56.61	2.81	6.61		

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

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Print Date: May 8th 2019

# TOCRIS a biotechne brand

### **Product Information**

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#### Product Name: RCM 1

Catalog No.: 6845

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CAS Number: 339163-65-4

IUPAC Name: 2-[[2-Oxo-2-(2-thienyl)ethyl]thio]-4,6-di-2-thienyl-3-pyridinecarbonitrile

#### **Description:**

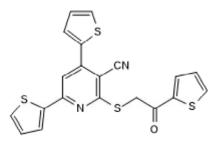
Forkhead box M1 (FOXM1) transcription factor inhibitor (IC<sub>50</sub> = 0.72  $\mu$ M). Inhibits expression of FOXM1 target genes. Induces FOXM1 protein degradation in vitro. Reduces airway resistance, increases lung compliance and decreases proinflammatory cytokine production in allergen-exposed mice.

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

Batch Molecular Formula: C<sub>20</sub>H<sub>12</sub>N<sub>2</sub>OS<sub>4</sub> Batch Molecular Weight: 424.58 Physical Appearance: Off White solid

#### Minimum Purity: >98%

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



#### **Storage:** Store at -20°C

Solubility & Usage Info: DMSO to 20 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:**

Sun et al (2017) The FOXM1 inhibitor RCM-1 suppresses goblet cell metaplasia and prevents IL-13 and STAT6 signaling in allergenexposed mice. Sci.Signal. **10** eaai8583. PMID: 28420758.

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