Certificate of Analysis

www.tocris.com

Product Name: ISX 9

CAS Number: 832115-62-5 **IUPAC Name:** N-Cyclopropyl-5-(2-thienyl)-3-isoxazolecarboxamide

1. PHYSICAL AND CHEMICAL PROPERTIES

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

 $C_{11}H_{10}N_2O_2S$ 234.27 Beige solid DMSO to 100 mM ethanol to 50 mM Store at +4°C

Storage: **Batch Molecular Structure:**

2. ANALYTICAL DATA

HPLC: ¹H NMR: Mass Spectrum: **Microanalysis:**

Shows 98.5% purity Consistent with structure Consistent with structure Carbon Hydrogen Nitrogen

	Carbonnyarogennarogen			
Theoretical	56.39	4.3	11.96	
Found	56.07	4.25	11.89	

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



Catalog No.: 4439 Batch No.: 2

Print Date: Apr 14th 2022

TOCRIS a biotechne brand

Product Information

www.tocris.com

Print Date: Apr 14th 2022

Product Name: ISX 9

Catalog No.: 4439

Batch No.: 2

CAS Number: IUPAC Name:

N-Cyclopropyl-5-(2-thienyl)-3-isoxazolecarboxamide

Description:

ISX 9 is a neurogenic agent. Mediates neuroD reporter gene induction via activation of Ca²⁺ influx; increases expression of neurogenic differentiation 1 (NeuroD1) transcription factor. Induces neuronal differentiation in human cortical neuronal cells (HCN), adult mouse whole brain (MWB) and subventricular zone (SVZ) progenitors. Also shown to induce cardiomyogenic differentiation of Notch-activated epicardium-derived cells in vitro. ISX 9 synthesized to Ancillary Material Grade also available. For more information about how ISX 9 may be used, see our protocol: Transdifferentiating Fibroblasts into Neurons. Please see product specific page on www.tocris.com for full description.

832115-62-5

Physical and Chemical Properties:

Batch Molecular Formula: $C_{11}H_{10}N_2O_2S$ Batch Molecular Weight: 234.27 Physical Appearance: Beige solid

Minimum Purity: ≥99%

Batch Molecular Structure:

References:

Russell et al (2012) Targeting native adult heart progenitors with cardiogenic small molecules. ACS Chem.Biol. 7 1067. PMID: 22413910.

Dioum *et al* (2011) A small molecule differentiation inducer increases Ins production by pancreatic β cells. Proc.Natl.Acad.Sci.U.S.A. **108** 20713. PMID: 22143803.

Zhang *et al* (2011) Small-molecule blocks malignant astrocyte proliferation and induces neuronal gene expression. Differentiation **81** 233. PMID: 21419563.

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Storage: Store at +4°C

Solubility & Usage Info: DMSO to 100 mM

ethanol to 50 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.