

**Product Name:** ML 351

**Catalog No.:** 6448

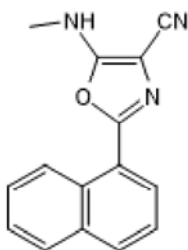
**Batch No.:** 1

CAS Number: 847163-28-4

IUPAC Name: 5-(Methylamino)-2-(1-naphthalenyl)-4-oxazolecarbonitrile

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>15</sub>H<sub>11</sub>N<sub>3</sub>O  
**Batch Molecular Weight:** 249.27  
**Physical Appearance:** Beige solid  
**Solubility:** DMSO to 100 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 99.3% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	72.28	4.45	16.86
Found	72.57	4.4	16.82

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

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**Description:**

Selective 12/15 LOX inhibitor ( $IC_{50} = 200$  nM). Exhibits >250-fold selectivity over related isozymes, 5-LOX, platelet 12-LOX, 15-LOX-2, ovine COX-1, and human COX-2. Protects against oxidative glutamate toxicity in mouse neuronal cells (HT-22) and reduces infarct size in a mouse ischemic stroke model.

**Physical and Chemical Properties:**

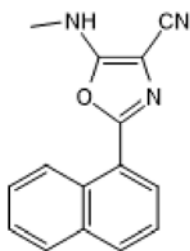
Batch Molecular Formula:  $C_{15}H_{11}N_3O$

Batch Molecular Weight: 249.27

Physical Appearance: Beige solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**References:**

Rai *et al* (2014) Potent and selective inhibitors of human reticulocyte 12/15-lipoxygenase as anti-stroke therapies. *J.Med.Chem.* **57** 4035. PMID: 24684213.

Rai *et al* (2014) Discovery of ML351, a potent and selective inhibitor of human 15-lipoxygenase-1. *Probe Reports from the NIH Molecular Libraries Program.* PMID: 24672829.

**Storage:** Store at -20°C

**Solubility & Usage Info:**

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.

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**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel:+1 612 379 2956