

**Product Name:** CDN 1163

**Catalog No.:** 5869

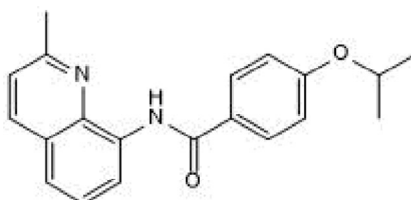
**Batch No.:** 2

CAS Number: 892711-75-0

IUPAC Name: 4-(1-Methylethoxy)-N-(2-methyl-8-quinolinyl)benzamide

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>20</sub>H<sub>20</sub>N<sub>2</sub>O<sub>2</sub>  
**Batch Molecular Weight:** 320.38  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
 ethanol to 100 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 99.9% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	74.98	6.29	8.74
Found	74.93	6.22	8.78

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

**Product Name:** CDN 1163

**Catalog No.:** 5869

**2**

CAS Number: 892711-75-0

IUPAC Name: 4-(1-Methylethoxy)-N-(2-methyl-8-quinolinyl)benzamide

**Description:**

CDN 1163 is a SERCA2 allosteric activator. Increases Ca<sup>2+</sup>-ATPase activity and Ca<sup>2+</sup> uptake by ER microsomes from obese mice. Rescues HEK cells from ER stress-induced cell death. Reduces fasting glucose levels and adipose tissue weight, and increases energy expenditure in ob/ob mice. Also improves glucose tolerance and reverses hepatic steatosis in ob/ob mice. Neuroprotective, improves memory and cognition in a mouse Alzheimer's disease model and reduces dyskinesia in rat model of Parkinson's disease. Orally bioavailable.

**Physical and Chemical Properties:**

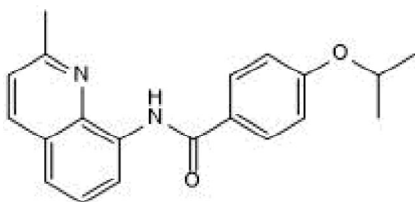
Batch Molecular Formula: C<sub>20</sub>H<sub>20</sub>N<sub>2</sub>O<sub>2</sub>

Batch Molecular Weight: 320.38

Physical Appearance: White solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**Storage:** Store at RT

**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. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

**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:**

**Krajnak and Dahl *et al*** (2018) A new target for Alzheimer's disease: A small molecule SERCA activator is neuroprotective *in vitro* and improves memory and cognition in APP/PS1 mice. *Bioorg.Med.Chem.Lett.* **28** 1591. PMID: 29602679 .

**Kang *et al*** (2016) Small molecular allosteric activator of the sarco/endoplasmic reticulum Ca<sup>2+</sup>-ATPase (SERCA) attenuates diabetes and metabolic disorders. *J.Biol.Chem.* **291** 5185. PMID: 26702054.

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

**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