



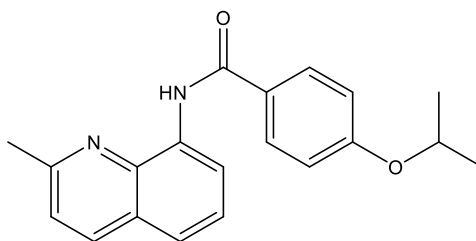
Catalog # 10-4627

CDN1163

CAS# 892711-75-0

4-(1-Methylethoxy)-N-(2-methyl-8-quinoliny)benzamide

Lot # FBA7094



CDN1163 is an allosteric activator of the sarco/endoplasmic reticulum Ca^{2+} -ATPase (SERCA).^{1,2} It lowered fasting glucose levels, improved glucose tolerance, and ameliorated hepatitis steatosis in ob/ob mice.¹ CDN1163 also rescued neurons from ER-stress-induced cell death *in vitro* and displayed significant efficacy in a rat 6-hydroxydopamine (6-OHDA) model of Parkinson's disease.² It reduced age-related muscle atrophy and weakness in a C57BL/6J mice.³ CDN1163 decreased inflammatory cytokines and chemokines and attenuated mitochondrial dysfunction in Influenza A infected H1395 cells.⁴

- 1) Kang *et al.* (2016), *Small Molecular Allosteric Activator of the Sarco/Endoplasmic Reticulum Ca^{2+} -ATPase (SERCA) Attenuates Diabetes and Metabolic Disorders*; J. Biol. Chem. **291** 5185
- 2) Dahl (2017), *A new target for Parkinson's disease: Small molecule SERCA activator CDN1163 ameliorates dyskinesia in 6-OHDA-lesioned rats*; Bioorg. Med. Chem. **25** 53
- 3) Qaisar *et al.* (2020), *Restoration of Sarcoplasmic Reticulum Ca^{2+} ATPase (SERCA) Activity Prevents Age-Related Muscle Atrophy and Weakness in Mice*; Int. J. Mol. Sci. **22** 37
- 4) Peng *et al.* (2021), *Sarco/Endoplasmic Reticulum Ca^{2+} Transporting ATPase (SERCA) Modulates Autophagic, Inflammatory, and Mitochondrial Responses during Influenza A Virus Infection in Human Lung Cells*; J. Virol. 10.1128/JVI00217-21

PHYSICAL DATA

Molecular Weight: 320.39
Molecular Formula: $\text{C}_{20}\text{H}_{20}\text{N}_2\text{O}_2$
Purity: >98% by HPLC
NMR: (Conforms)
Solubility: DMSO (>25 mg/ml)
Physical Description: White solid
Storage and Stability: Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

Focus Biomolecules LLC 400 Davis Drive, Suite 600 Plymouth Meeting PA 19462

www.focusbiomolecules.com