

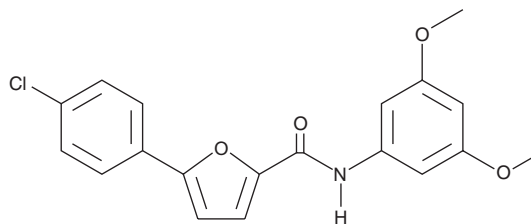
PRODUCT INFORMATION



A-803467

Item No. 10012588

CAS Registry No.: 944261-79-4
Formal Name: 5-(4-chlorophenyl)-N-(3,5-dimethoxyphenyl)-2-furancarboxamide
MF: C₁₉H₁₆ClNO₄
FW: 357.8
Purity: ≥98%
UV/Vis.: λ_{max}: 319 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

A-803467 is supplied as a crystalline solid. A stock solution may be made by dissolving the A-803467 in the solvent of choice, which should be purged with an inert gas. A-803467 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of A-803467 in these solvents is approximately 2.5, 25, and 30 mg/ml, respectively.

Description

Na_v1.8 is a tetrodotoxin-resistant (TTX-R) sodium channel with high activation threshold and slow inactivating kinetics that is highly expressed in small-diameter sensory neurons and has been implicated in signaling various types of pain. A-803467 is a sodium channel blocker with high-affinity and selectivity for inhibiting human Na_v1.8 sodium channels (IC₅₀ = 8 nM when stimulated at half-maximal inactivation and IC₅₀ = 79 nM at a resting state).¹ This compound is unusual in that it blocks hNa_v1.8 at negative resting membrane potentials (many small molecule sodium channel blockers show a reduced affinity for the resting state) and does not demonstrate significant frequency-dependent block during a 10 Hz pulse train.² A-803467 dose-dependently reduces behavioral responses in a variety of neuropathic and inflammatory pain models.¹

References

1. Jarvis, M.F., Honore, P., Shieh, C.-C., *et al.* A-803467, a potent and selective Na_v1.8 sodium channel blocker, attenuates neuropathic and inflammatory pain in the rat. *Proc. Natl. Acad. Sci. USA* **104**(20), 8520-8525 (2007).
2. Krafte, D.S., Chapman, M., Marron, B., *et al.* Block of NA_v1.8 by small molecules. *Channels (Austin)* **1**(3), 152-153 (2007).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/09/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM