

Certificate of Analysis

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Product Name: A 803467

Catalog No.: 2976

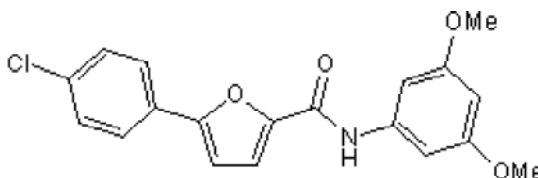
Batch No.: 3

CAS Number: 944261-79-4

IUPAC Name: 5-(4-Chlorophenyl)-N-(3,5-dimethoxyphenyl)-2-furancarboxamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₉H₁₆ClNO₄
Batch Molecular Weight: 357.79
Physical Appearance: Beige solid
Solubility: DMSO to 100 mM
 ethanol to 25 mM
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.2% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	63.78	4.51	3.91
Found	63.61	4.51	4.16

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

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Description:

Selective blocker of Na_v1.8 channels (IC₅₀ values are 8, 2450, 6740, 7340 and 7380 nM for hNa_v1.8, hNa_v1.3, hNa_v1.7, hNa_v1.5 and hNa_v1.2 channels respectively). Shows no significant activity against TRPV1, P2X_{2/3}, Ca_v2.2 and KCNQ2/3 channels. Antinociceptive; potently attenuates mechanical allodynia in two models of neuropathic pain following i.p. administration.

Physical and Chemical Properties:

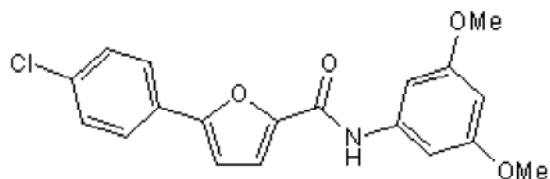
Batch Molecular Formula: C₁₉H₁₆ClNO₄

Batch Molecular Weight: 357.79

Physical Appearance: Beige solid

Minimum Purity: >98%

Batch Molecular Structure:



References:

Kort et al (2008) Discovery and biological evaluation of 5-Aryl-2-furfuramides, potent and selective blockers of the Na_v1.8 sodium channel with efficacy in models of neuropathic and inflammatory pain. *J.Med.Chem.* **51** 407. PMID: 18176998.

McGarughty et al (2008) A selective Na_v1.8 sodium channel blocker, A-803467 [5-(4-chlorophenyl)-N-(3,5-dimethoxyphenyl)furan-2-carboxamide], attenuates spinal neuronal activity in neuropathic rats. *J.Pharmacol.Exp.Ther.* **324** 1204. PMID: 18089840.

Jarvis et al (2007) A-803467, a potent and selective Na_v1.8 sodium channel blocker, attenuates neuropathic and inflammatory pain in the rat. *Proc.Natl.Acad.Sci.* **104** 8520.

Rush and Cummins (2007) Painful research: identification of a small-molecule inhibitor that selectively targets Na_v1.8 sodium channels. *Mol.Interv.* **7** 192. PMID: 17827438.

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 25 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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