

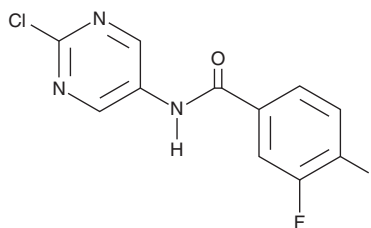
PRODUCT INFORMATION



ICA 069673

Item No. 22995

CAS Registry No.: 582323-16-8
Formal Name: N-(2-chloro-5-pyrimidinyl)-3,4-difluoro-benzamide
MF: C₁₁H₆ClF₂N₃O
FW: 269.6
Purity: ≥98%
UV/Vis.: λ_{max}: 267 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

ICA 069673 is supplied as a crystalline solid. A stock solution may be made by dissolving the ICA 069673 in the solvent of choice, which should be purged with an inert gas. ICA 069673 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of ICA 069673 in these solvents is approximately 30 mg/ml.

Description

ICA 069673 is a heteromeric K_v7 channel activator.^{1,2} It is selective for K_v7.2/7.3 over K_v7.3/7.5 (EC₅₀s = 0.69 and 14.3 μM, respectively) and also activates K_v7.4, K_v7.5, and heteromeric K_v7.4/7.5 channels in a dose-dependent manner.² ICA 069673 has no activity against hERG, Na_v1.5, and K_v7.1 cardiac ion channels (IC₅₀s = >30 μM).¹ Oral administration of ICA 069673 increases latency to first tonic-clonic seizure in the rat maximal electroshock and pentylenetetrazol-induced seizure models (ED₅₀s = 1.5 and <1 mg/kg, respectively).¹ Formulations containing ICA 069673 are under clinical investigation for the treatment of epilepsy.

References

1. Amato, G., Roeloffs, R., Rigdon, G.C., *et al.* N-Pyridyl and pyrimidine benzamides as KCNQ2/Q3 potassium channel openers for the treatment of epilepsy. *ACS Med. Chem. Lett.* **2(6)**, 481-484 (2011).
2. Brueggemann, L.I., Haick, J.M., Cribbs, L.L., *et al.* Differential activation of vascular smooth muscle Kv7.4, Kv7.5, and Kv7.4/7.5 channels by ML213 and ICA-069673. *Mol. Pharmacol.* **86(3)**, 330-341 (2014).

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.

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