

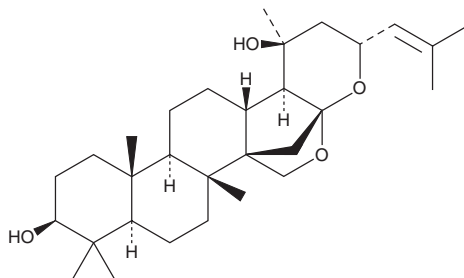
PRODUCT INFORMATION



ML-418

Item No. 43042

CAS Registry No.: 1928763-08-9
Formal Name: N-[1-[(5-chloro-8-hydroxy-7-quinolinyl)methyl]-4-piperidinyl]-carbamic acid, 1-methylethyl ester
MF: $C_{19}H_{24}ClN_3O_3$
FW: 377.9
Purity: $\geq 98\%$
Supplied as: A 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

ML-418 is supplied as a solid. A stock solution may be made by dissolving the ML-418 in the solvent of choice, which should be purged with an inert gas. ML-418 is slightly soluble (0.1-1 mg/ml) in ethanol and DMSO.

Description

ML-418 is an inhibitor of inward-rectifier potassium channel 7.1 ($K_{ir}7.1$; $IC_{50} = 0.31 \mu\text{M}$).¹ It is selective for $K_{ir}7.1$ over $K_{ir}1.1$, $K_{ir}2.1$, and $K_{ir}4.1$ (IC_{50} s = $>30 \mu\text{M}$ for all) but does inhibit sulfonylurea receptor 1 (SUR1) linked to ATP-sensitive potassium channel $K_{ir}6.2$ (SUR1/ $K_{ir}6.2$; $IC_{50} = 1.9 \mu\text{M}$).

Reference

1. Swale, D.R., Kurata, H., Kharade, S.V., et al. ML418: The first selective, sub-micromolar pore blocker of Kir7.1 potassium channels. *ACS Chem. Neurosci.* **7**(7), 1013-1023 (2016).

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

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