

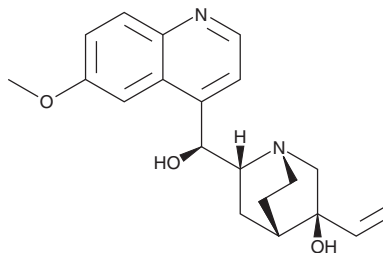
PRODUCT INFORMATION



(3S)-hydroxy Quinidine

Item No. 23411

CAS Registry No.: 53467-23-5
Formal Name: 6'-methoxy-cinchonan-3,9S-diol
MF: $C_{20}H_{24}N_2O_3$
FW: 340.4
Purity: $\geq 98\%$
Supplied as: A solid
Storage: 4°C
Stability: ≥ 4 years



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

Laboratory Procedures

(3S)-hydroxy Quinidine is supplied as a solid. A stock solution may be made by dissolving the (3S)-hydroxy quinidine in the solvent of choice which should be purged with an inert gas. (3S)-hydroxy Quinidine is soluble in the organic solvent methanol.

Description

(3S)-hydroxy Quinidine is an active quinidine metabolite.¹ Quinidine, an antiarrhythmic agent, undergoes rapid first-pass metabolism by the cytochrome P450 (CYP) isoforms CYP3A4, CYP2C9, CYP2E1, and CYP3A5, with CYP3A4 being the most active enzyme in the (3S)-hydroxy quinidine formation. (3S)-hydroxy Quinidine prolongs repolarization of canine Purkinje fibers *in vitro* and prevents ventricular fibrillation and ventricular tachycardia after coronary reperfusion in isolated rat hearts in a dose-dependent manner.^{2,3}

References

1. Nielsen, T.L., Rasmussen, B.B., Flinois, J.-P., *et al.* In vitro metabolism of quinidine: The (3S)-3-hydroxylation of quinidine is a specific marker reaction for cytochrome P-4503A4 activity in human liver microsomes. *J. Pharmacol. Exp. Ther.* **289**(1), 31-37 (1999).
2. Vozeh, S., Oti-Amoako, K., Uematsu, T., *et al.* Antiarrhythmic activity of two quinidine metabolites in experimental reperfusion arrhythmia: Relative potency and pharmaco-dynamic interaction with the parent drug. *J. Pharmacol. Exp. Ther.* **243**(1), 297-301 (1987).
3. Thompson, K.A., Blair, I.A., Woosley, R.L., *et al.* Comparative *in vitro* electrophysiology of quinidine, its major metabolites and dihydroquinidine. *J. Pharmacol. Exp. Ther.* **24**(1), 84-90 (1987).

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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