

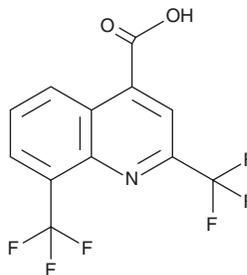
PRODUCT INFORMATION



2,8-Bis(trifluoromethyl)quinoline-4-carboxylic Acid

Item No. 43066

CAS Registry No.: 35853-50-0
Formal Name: 2,8-bis(trifluoromethyl)-4-quinolinecarboxylic acid
Synonyms: 4-Carboxymefloquine, Mefloquine Carboxylic Acid
MF: C₁₂H₅F₆NO₂
FW: 309.2
Purity: ≥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

2,8-Bis(trifluoromethyl)quinoline-4-carboxylic acid is supplied as a solid. A stock solution may be made by dissolving the 2,8-bis(trifluoromethyl)quinoline-4-carboxylic acid in the solvent of choice, which should be purged with an inert gas. 2,8-Bis(trifluoromethyl)quinoline-4-carboxylic acid is soluble (≥10 mg/ml) in ethanol and DMSO.

Description

2,8-Bis(trifluoromethyl)quinoline-4-carboxylic acid is an agonist of pregnane X receptor (PXR) and an active metabolite of mefloquine (Item No. 23665).^{1,2} It is formed from mefloquine by cytochrome P450 (CYP) isoform 3A (CYP3A).² 2,8-Bis(trifluoromethyl)quinoline-4-carboxylic acid increases the levels of CYP3A4 in a reporter assay using HepG2 cells expressing human PXR (EC₅₀ = 24 μM).¹ It induces the expression of mRNA encoding P-glycoprotein (P-gp), also known as multidrug resistance protein 1 (MDR1), CYP2B6, and CYP3A4 in LS 174T cells.

References

1. Piedade, R., Traub, S., Bitter, A., *et al.* Carboxymefloquine, the major metabolite of the antimalarial drug mefloquine, induces drug-metabolizing enzyme and transporter expression by activation of pregnane X receptor. *Antimicrob. Agents Chemother.* **59(1)**, 96-104 (2015).
2. Fontaine, F., de Sousa, G., Burcham, P.C., *et al.* Role of cytochrome P450 3A in the metabolism of mefloquine in human and animal hepatocytes. *Life Sci.* **66(22)**, 2193-2212 (2000).

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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