

PRODUCT INFORMATION

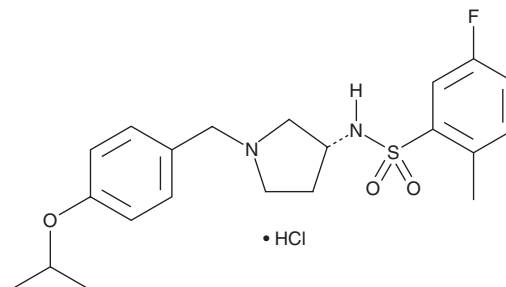


(R)-Gyramide A (hydrochloride)

Item No. 18528

CAS Registry No.: 1793050-70-0
Formal Name: 5-fluoro-2-methyl-N-[(3R)-1-[[4-(1-methylethoxy)phenyl]methyl]-3-pyrrolidinyl]-benzenesulfonamide, monohydrochloride

Synonym: (R)-534F6
MF: C₂₁H₂₇FN₂O₃S • HCl
FW: 443.0
Purity: ≥95%
UV/Vis.: λ_{max}: 229, 275, 282 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4years



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

Laboratory Procedures

(R)-Gyramide A (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the (R)-gyramide A (hydrochloride) in the solvent of choice, which should be purged with an inert gas. (R)-Gyramide A (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of (R)-gyramide A (hydrochloride) in these solvents is approximately 50 mg/ml.

(R)-Gyramide A (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, (R)-gyramide A (hydrochloride) should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. (R)-Gyramide A (hydrochloride) has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

(R)-Gyramide A is a bacterial DNA gyrase inhibitor that disrupts supercoiling activity with an IC₅₀ value of 3.3 μM.¹ It does not affect the closely related enzyme topoisomerase IV.² (R)-Gyramide A demonstrates antibacterial activity against *E. coli*, *P. aeruginosa*, and *S. enterica* (MICs range from 10-80 μM).¹

References

1. Foss, M.H., Hurley, K.A., Sorto, N.A., et al. N-Benzyl-3-sulfonamidopyrrolidines are a new class of bacterial DNA gyrase inhibitors. *ACS Med. Chem. Lett.* **2**(4), 289-292 (2011).
2. Rajendram, M., Hurley, K.A., Foss, M.H., et al. Gyramides prevent bacterial growth by inhibiting DNA gyrase and altering chromosome topology. *ACS Chem. Biol.* **9**(6), 1312-1319 (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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