

Product Data Sheet

Product Name: Rifamycin S

Cat. No.: GC39239

Chemical Properties

Cas. No. 13553-79-2

SMILES O=C1C2=C(C(C=C3NC(/C(C)=C/C=C/[C@H](C)[C@H](O)[C@@H](C)[C@@H](O)[C@H]4C)=O)=O)C(C3=O)=C(O)C(C)=C2O[C@@]1(O/C=C/[C@@H]([C@H]([C@@]4([H])OC(C)=O)C)OC)C

Formula C₃₇H₄₅NO₁₂ M.Wt 695.75

Solubility DMSO: 250 mg/mL (359.32 mM) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

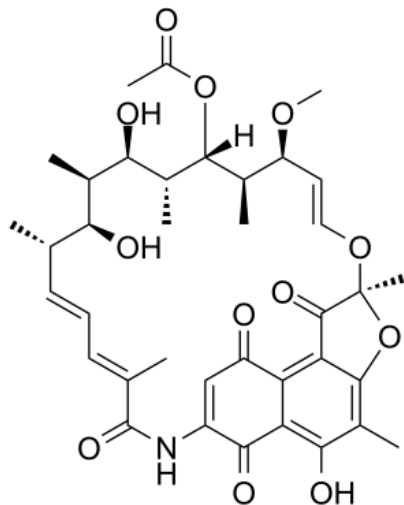
Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

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Structure



Background

Rifamycin S is a quinone and an antibiotic agent against Gram-positive bacteria (including MRSA). Rifamycin S is the oxidized form of a reversible oxidation-reduction system involving two electrons. Rifamycin S generates reactive oxygen species (ROS) and inhibits microsomal lipid peroxidation. Rifamycin S can be used for tuberculosis and leprosy[1][2][3].

- [1]. Rao DN, et al. A comparative study of the redox-cycling of a quinone (rifamycin S) and a quinonimine (rifabutin) antibiotic by rat liver microsomes. *Free Radic Biol Med.* 1997;22(3):439-46.
[2]. Kono Y. Oxygen Enhancement of bactericidal activity of rifamycin SV on *Escherichia coli* and aerobic oxidation of rifamycin SV to rifamycin S catalyzed by manganous ions: the role of superoxide. *J Biochem.* 1982 Jan;91(1):381-95. [3]. Huang H, et al. Rifamycin S and its geometric isomer produced by a newly found actinomycete, *Micromonospora rifamycinica*. *Antonie Van Leeuwenhoek.*

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