

Product Data Sheet

Product Name: Metronidazole-d4

Cat. No.: GC47670

Chemical Properties

Cas. No. 1261392-47-5

SMILES CC1=NC=C([N+]([O-])=O)N1C([2H])([2H])C([2H])([2H])O

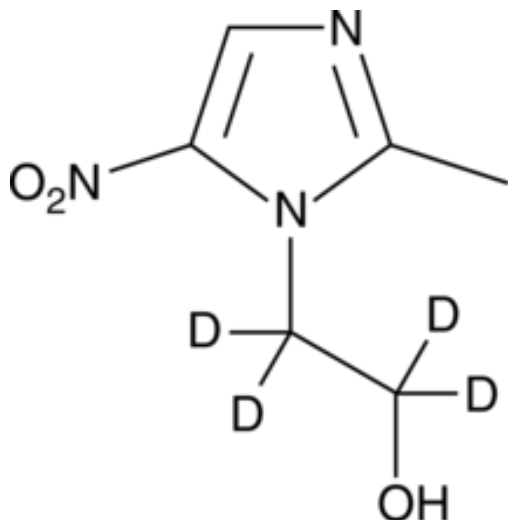
Formula C₆H₅D₄N₃O₃ M.Wt 175.2

Solubility DMF: 15 mg/ml, DMSO: 15 mg/ml, Ethanol: 5 mg/ml 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.

Structure



Background

Metronidazole-d₄ is intended for use as an internal standard for the quantification of metronidazole by GC- or LC-MS. Metronidazole is an antibiotic that has activity against anaerobic bacteria and protozoa including *T. vaginalis*, *E. histolytica*, *G. lamblia*, *C. difficile*, and *H. pylori*.¹ It reduces the growth of *E. coli in vitro* (MIC = 128 mg/L under anaerobic conditions).² *In vivo*, metronidazole

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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reduces viable counts of *B. fragilis* in a rabbit model of infection. Formulations containing metronidazole have been used in the treatment of various infections including *H. pylori* and *C. difficile*.

1.Samuelson, J.Why metronidazole is active against both bacteria and parasitesAntimicrob. Agents Chemother.43(7)1533-1541(1999) 2.Rylander, M., Holm, S.E., Brorson, J.-E., et al.Activity of metronidazole on Bacteroides fragilis and/or Escherichia coli in vitro and in vivoJ. Antimicrob. Chemother.7(3)257-267(1981)

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