

Product Data Sheet

Product Name: GS-441524-d

Cat. No.: GC79988

Chemical Properties

Cas. No. 2647440-98-8

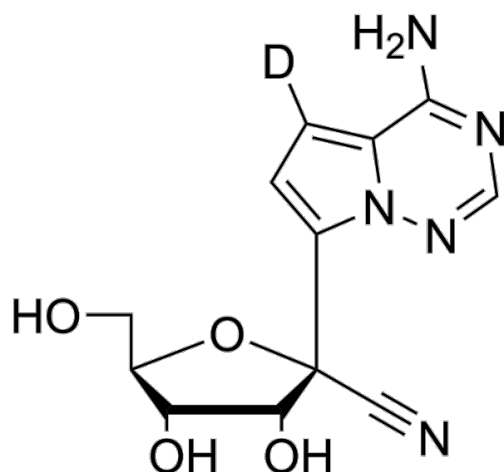
Formula $C_{12}H_{12}DN_5O_4$ M.Wt 292.27

Solubility 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

GS-441524 -d is the deuterium labeled GS-441524. GS-441524 is a potent, orally active and CNS-penetrant viral RNA-dependent RNA polymerase inhibitor. GS-441524 competes with natural nucleosides to block viral RNA transcription as an alternative substrate and RNA chain terminator. GS-441524 inhibits the replication of feline infectious peritonitis virus, African swine fever virus, and severe acute respiratory syndrome coronavirus 2. GS-441524 reduces viral RNA levels in cats. GS-441524 can be used in research related to feline infectious peritonitis, African swine fever, and coronavirus disease 2019 (COVID-19) [1] [2] [3] [4] [5].

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

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In Vitro, Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs.

References:

- [1]. Murphy BG, et al. The nucleoside analog GS-441524 strongly inhibits feline infectious peritonitis (FIP) virus in tissue culture and experimental cat infection studies. *Vet Microbiol.* 2018 Jun;219:226-233.
- [2]. Huang Z, et al. GS-441524 inhibits African swine fever virus infection in vitro. *Antiviral Res.* 2021;191:105081.
- [3]. Rasmussen HB, et al. Nucleoside analog GS-441524: pharmacokinetics in different species, safety, and potential effectiveness against Covid-19. *Pharmacol Res Perspect.* 2022;10(2):e00945.
- [4]. Pedersen NC, et al. Efficacy and safety of the nucleoside analog GS-441524 for treatment of cats with naturally occurring feline infectious peritonitis. *J Feline Med Surg.* 2019;21(4):271-281.
- [5]. Coggins SJ, et al. Outcomes of treatment of cats with feline infectious peritonitis using parenterally administered remdesivir, with or without transition to orally administered GS-441524. *J Vet Intern Med.* 2023;37(5):1772-1783.

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