

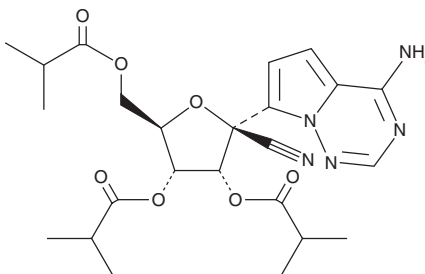
PRODUCT INFORMATION



GS-621763

Item No. 34125

CAS Registry No.: 2563617-99-0
Formal Name: 6-((1E,3Z,6Z,9Z)-pentadeca-1,3,6,9-tetraen-1-yl)tetrahydro-2H-pyran-2-one
Synonym: GS-441524 tris-isobutyryl ester
MF: C₂₄H₃₁N₅O₇
FW: 501.5
Purity: ≥98%
UV/Vis.: λ_{max}: 246 nm
Supplied as: A crystalline 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

GS-621763 is supplied as a crystalline solid. A stock solution may be made by dissolving the GS-621763 in the solvent of choice, which should be purged with an inert gas. GS-621763 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of GS-621763 in these solvents is approximately 10 mg/ml.

GS-621763 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, GS-621763 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. GS-621763 has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

GS-621763 is an orally bioavailable prodrug form of the antiviral nucleotide analog GS-443902, which is also an active metabolite of remdesivir (Item No. 30354).^{1,2} Upon intestinal absorption, GS-621763 is metabolized into the intermediate metabolite GS-441524 (Item No. 30469), which is then further metabolized to the active nucleotide triphosphate GS-443902 in cells where it induces RNA chain termination and inhibits viral polymerases.² It reduces the cytopathic effect of respiratory syncytial virus (RSV) in infected HEp-2 cells (EC₅₀ = 0.26 μM), as well as reduces viral titers in Vero E6 cells infected with various clinical isolates of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; EC₅₀ = 0.11-0.73 μM). GS-621763 (10 mg/kg) inhibits viral transmission in ferrets infected with the SARS-CoV-2 variant of concern (VOC) P.1, also known as the gamma variant.²

Reference

1. Mackman, R.L., Hui, H.C., Perron, M., *et al.* Prodrugs of a 1'-CN-4-aza-7,9-dideazaadenosine C-nucleoside leading to the discovery of remdesivir (GS-5734) as a potent inhibitor of respiratory syncytial virus with efficacy in the african green monkey model of RSV. *J. Med. Chem.* **64**(8), 5001-5017 (2021).
2. Cox, R.M., Wolf, J.D., Lieber, C.M., *et al.* Oral prodrug of remdesivir parent GS-441524 is efficacious against SARS-CoV-2 in ferrets. *Nat. Commun.* **12**(1), 6415 (2021).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 03/26/2024

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM