

PRODUCT INFORMATION

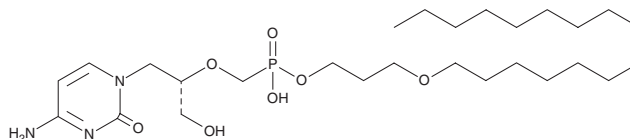


Brincidofovir

Item No. 35062

CAS Registry No.: 444805-28-1
Formal Name: P-[[[(1S)-2-(4-amino-2-oxo-1(2H)-pyrimidinyl)-1-(hydroxymethyl)ethoxy)methyl]-phosphonic acid, mono[3-(hexadecyloxy)propyl] ester
Synonyms: hexadecyloxypropyl-CDV, 1-O-hexadecyloxypropyl Cidofovir, CMX001, HDP-CDV, HDP (S)-HPMPC

MF: C₂₇H₅₂N₃O₇P
FW: 561.7
Purity: ≥98%
UV/Vis.: λ_{max}: 285 nm
Supplied as: A 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

Brincidofovir is supplied as a solid. A stock solution may be made by dissolving the brincidofovir in the solvent of choice, which should be purged with an inert gas. Brincidofovir is soluble in ethanol.

Description

Brincidofovir is a prodrug form of the antiviral and acyclic nucleoside phosphonate cidofovir (Item No. 13113).¹ Brincidofovir is converted to cidofovir in MRC-5 human lung fibroblasts. It inhibits CMV, herpes simplex virus 1 (HSV-1), HSV-2, cowpox, and vaccinia virus replication in plaque reduction assays (EC₅₀s = 0.0009, 0.06, 0.08, 0.6, and ~1 μM, respectively). Brincidofovir decreases mortality in mouse models of cowpox or vaccinia virus infections when administered at doses of 6.7 or 5 mg/kg, respectively.² Formulations containing brincidofovir have been used in the treatment of smallpox disease.

References

1. Aldern, K.A., Ciesla, S.L., Winegarden, K.L., *et al.* Increased antiviral activity of 1-O-hexadecyloxypropyl-[2-¹⁴C]cidofovir in MRC-5 human lung fibroblasts is explained by unique cellular uptake and metabolism. *Mol. Pharmacol.* **63**(3), 678-681 (2003).
2. Quenelle, D.C., Collins, D.J., Wan, W.B., *et al.* Oral treatment of cowpox and vaccinia virus infections in mice with ether lipid esters of cidofovir. *Antimicrob. Agents Chemother.* **48**(2), 404-412 (2004).

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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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