PRODUCT INFORMATION



HIV-1 Integrase Inhibitor

Item No. 38779

CAS Registry No.: 544467-07-4

4-[3-(azidomethyl)phenyl]-2-Formal Name:

hydroxy-4-oxo-2-butenoic acid

Synonyms: 118-D-24, MA-DKA

MF: $C_{11}H_{9}N_{3}O_{4}$ 247.2 FW: **Purity:** ≥95% 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

HIV-1 integrase inhibitor is supplied as a solid. A stock solution may be made by dissolving the HIV-1 integrase inhibitor in the solvent of choice, which should be purged with an inert gas. HIV-1 integrase inhibitor is sparingly soluble (1-10 mg/ml) in DMSO.

Description

HIV-1 integrase inhibitor is an inhibitor of HIV-1 integrase strand transfer (IC $_{50}\text{s}$ = 0.07 and 0.33 μM in the presence of manganese and magnesium, respectively). 1 It is selective for HIV-1 integrase strand transfer over HIV-1 integrase 3' DNA processing (IC $_{50}$ = >70 μM in the presence of either manganese or magnesium) and for wild-type HIV-1 integrase over a double-mutant HIV-1 integrase containing F185K and C280S substitutions (HIV-1 integrase $^{F185K/C280S}$; IC₅₀ = 1.53 μ M in the presence of manganese). HIV-1 integrase inhibitor reduces the secreted levels of p24, a marker of HIV-1 replication, in CEM-SS and H9 cells (IC₅₀s = 11 and 7 μ M, respectively) without inducing cytotoxicity (CC₅₀s = 600 and 400 μ M, respectively).²

References

- 1. Marchand, C., Johnson, A.A., Karki, R.G., et al. Metal-dependent inhibition of HIV-1 integrase by β-diketo acids and resistance of the soluble double-mutant (F185K/C280S). Mol. Pharmacol. 64(3), 600-609 (2003).
- Svarovskaia, E.S., Barr, R., Zhang, X., et al. Azido-containing diketo acid derivatives inhibit human immunodeficiency virus type 1 integrase in vivo and influence the frequency of deletions at two-longterminal-repeat-circle junctions. J. Virol. 78(7), 3210-3222 (2004).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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

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

Copyright Cayman Chemical Company, 03/20/2024

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