



NIH AIDS Reagent Program

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DATA SHEET

Reagent: Integrase Inhibitor (118-D-24)

Catalog Number: 9957

Lot Number: NB17-72-1

Release Category: E

Provided: 20 mg

Chemical Name: 4-[3-(azidomethyl)phenyl]-2-hydroxy-4-oxo-2-butenic acid

Empirical Formula: C₁₁H₉N₃O₄

Molecular Weight: 247.2

CAS Num: 544467-07-4

Solubility: Soluble in common organic solvents; insoluble in water.

Mechanical Action: Azido-containing diketo acid derivatives are potent inhibitors of the strand transfer reaction catalyzed by HIV-1 integrase. It has been found that in the presence of azido-containing diketo acid derivatives, the frequency of 2-LTR-circle formation was increased without affecting total viral cDNA synthesis (*J. Virol.* **78**:3210, 2004).

Recommended Storage: Room temperature. Once resuspended, working aliquots can be stored at -20°C.

Contributor: NIAID, DAIDS

ALL RECIPIENTS OF THIS MATERIAL MUST COMPLY WITH ALL APPLICABLE BIOLOGICAL, CHEMICAL, AND/OR RADIOCHEMICAL SAFETY STANDARDS INCLUDING SPECIAL PRACTICES, EQUIPMENT, FACILITIES, AND REGULATIONS. NOT FOR USE IN HUMANS.

References:

Svarovskaia ES, Barr R, Zhang X, Pais GC, Marchand C, Pommier Y, Burke TR Jr, Pathak VK. Azido-containing diketo acid derivatives inhibit human immunodeficiency virus type 1 integrase in vivo and influence the frequency of deletions at two-long-terminal-repeat-circle junctions. *Journal of Virology*. **78**:3210-22, 2004. Zhang X, Pais GC, Svarovskaia ES, Marchand C, Johnson AA, Karki RG, Nicklaus MC, Pathak VK, Pommier Y, Burke TR. Azido-containing aryl beta-diketo acid HIV-1 integrase inhibitors. *Bioorg Med Chem Lett*. **13**:1215-1219, 2003.

NOTE:

Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: Integrase Inhibitor (118-D-24) from NIAID, DAIDS (cat# 9957)."

The synthesis, chemical structure, and inhibitory activity of this compound against HIV-1 integrase was published by X. Zhang, et al. in *Bioorg Med Chem Lett*. **13**:1215-1219, 2003 (referred to as compound 11 therein). Its chemical name is 4-[3-(azidomethyl)phenyl]-2-hydroxy-4-oxo-2-butenic acid.

This compound is limited to 40 mg per requester per year.

Recipient agrees that the reagent (Integrase Inhibitor (118-D-24)) use is permitted only as a standard for in vitro and/or studies in animals for inhibition of HIV replication.

Last Updated

July 24, 2018

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