



## NIH AIDS Reagent Program

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### DATA SHEET

<b>Reagent:</b>	Integrase Inhibitor (118-D-24)
<b>Catalog Number:</b>	9957
<b>Lot Number:</b>	NB17-72-1
<b>Release Category:</b>	E
<b>Provided:</b>	20 mg
<b>Chemical Name:</b>	4-[3-(azidomethyl)phenyl]-2-hydroxy-4-oxo-2-butenic acid
<b>Empirical Formula:</b>	C <sub>11</sub> H <sub>9</sub> N <sub>3</sub> O <sub>4</sub>
<b>Molecular Weight:</b>	247.2
<b>CAS Num:</b>	544467-07-4
<b>Solubility:</b>	Soluble in common organic solvents; insoluble in water.
<b>Mechanical Action:</b>	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 ( <i>J. Virol.</i> <b>78</b> :3210, 2004).
<b>Special Characteristics:</b>	<a href="#">Click here for the SDS</a>
<b>Recommended Storage:</b>	Room temperature. Once resuspended, working aliquots can be stored at -20°C.

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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.

**Contributor:** NIAID, DAIDS

**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.

**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** November 25, 2019

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