

Product Data Sheet

Product Name: EFdA-TP tetrasodium

Cat. No.: GC70800

Chemical Properties

Cas. No. 2883783-00-2

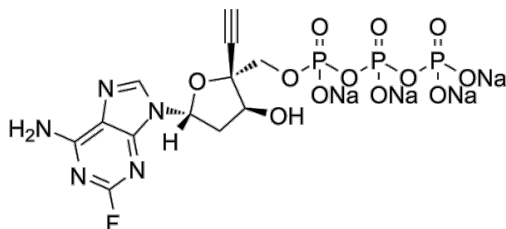
Formula $C_{12}H_{11}FN_5Na_4O_{12}P_3$ M.Wt 621.12

Solubility Storage -20°C, sealed storage, away from moisture and light

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

EFdA-TP tetrasodium is a potent nucleoside reverse transcriptase (RT) inhibitor. EFdA-TP tetrasodium inhibits RT-catalyzed DNA synthesis as an effective immediate or delayed chain terminator (ICT or DCT). EFdA-TP tetrasodium inhibits HIV-1 RT with multiple mechanisms. EFdA-TP (tetrasodium) is a click chemistry reagent, it contains an Alkyne group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAC) with molecules containing Azide groups.

EFdA-TP tetrasodium (0.05-10 µM; for 15 min) inhibits RT-catalyzed DNA synthesis as an ICT or

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

DCT^[1].

EFdA-TP tetrasodium can block RT as a translocation-defective RT inhibitor that dramatically slows DNA synthesis, acting as a de facto immediate chain terminator. EFdA-TP tetrasodium can function as a delayed chain terminator, allowing incorporation of an additional dNTP before blocking DNA synthesis^[1].

References:

- [1]. Martin Markowitz, et al. 4'-Ethynyl-2-fluoro-2'-deoxyadenosine, MK-8591: a novel HIV-1 reverse transcriptase translocation inhibitor. Curr Opin HIV AIDS. 2018 Jul;13(4):294-299.
- [2]. Eleftherios Michailidis, et al. 4'-Ethynyl-2-fluoro-2'-deoxyadenosine (EFdA) inhibits HIV-1 reverse transcriptase with multiple mechanisms. J Biol Chem. 2014 Aug 29;289(35):24533-48.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA