

Product Data Sheet

Product Name: Valaciclovir

Cat. No.: GC10955

Chemical Properties

Cas. No. 124832-26-4

Chemical Name 2-((2-amino-6-oxo-3H-purin-9(6H)-yl)methoxy)ethyl 2-amino-3-methylbutanoate

SMILES CC(C(N)C(OCCOCN1C=NC2=C1NC(N)=NC2=O)=O)C

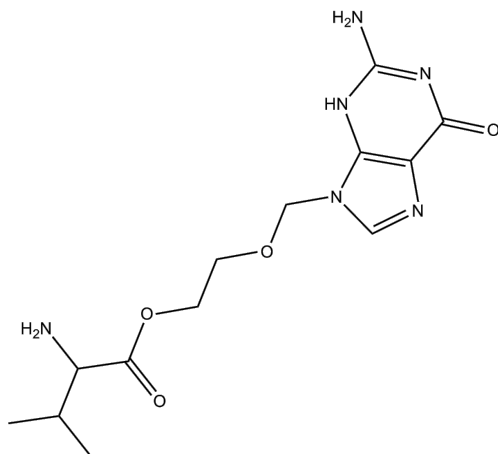
Formula $C_{13}H_{20}N_6O_4$ M.Wt 324.34

Solubility Soluble in DMSO Storage Store at -20°C

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

IC₅₀ Value: 2.9 microg/ml (for HSV-1 W)[4]. Valaciclovir, the metabolic precursor of , is now approved for treatment and prevention of genital infection with herpes simplex viruses [1]. in vitro: VACV uptake was concentration dependent and saturable with a Michaelis-Menten constant and maximum velocity of 1.64 +/- 0.06 mM and 23.34 +/- 0.36 nmol/mg protein/5 min, respectively. A very similar Km value was obtained in hPEPT1/CHO cells and in rat and rabbit tissues and Caco-2 cells,

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suggesting that hPEPT1 dominates the intestinal transport properties of VACV in vitro [5]. in vivo: For treatment of a first episode of genital herpes, a large comparative trial has shown that valacyclovir (1 g twice a day) is as effective as acyclovir (200 mg five times a day) when given for 10 days. For treating recurrences, two trials show that valacyclovir is as effective as acyclovir (200 mg five times a day) with a treatment period of 5 days. A daily dose of 1 g of valacyclovir is as effective as 2 g daily. Valacyclovir can be administered once a day[1]. The concentrations of acyclovir in serum and CSF were measured at steady state after 6 days of oral treatment with 1,000 mg of valacyclovir three times a day [2]. EC50 values of PE and AC in 3T3 cells were 0.02 and 0.01 ug/ml, while values in BHK cells were 0.2 and 0.03 ug/ml. Treatment of infected immunosuppressed mice and FA and VA (b.i.d., 5.5 days) reduced the proportion with erythema from 100% to 24% and 38%, and eliminated ear paralysis, ear lesions (vesicles, etc) and death. Virus was absent from ear and brainstem by day 6, but reappeared after discontinuation in mice treated with VA [3]. Clinical trial: Evaluation of Valaciclovir in Patients with Chickenpox. Phage3

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