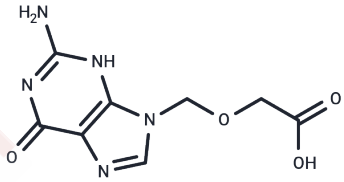
Data Sheet (Cat.No.T40911)

TargetMol

9-Carboxymethoxymethylguanine

Chemical Properties



CAS No. : 80685-22-9

Formula: C8H9N5O4

Molecular Weight: 239.19

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	9-Carboxymethoxymethylguanine is the primary metabolite derived from Aciclovir, a guanosine analogue with potent antiviral properties. Aciclovir, also known as Acyclovir, acts as an orally active antiviral agent.
Targets(IC50)	Others,HSV
In vitro	Acyclovir undergoes metabolism through two sequential enzymatic reactions; initially, the alcohol dehydrogenase (ADH) enzyme converts it into acyclovir aldehyde. Following this conversion, the aldehyde dehydrogenase (ALDH) enzyme further metabolizes acyclovir aldehyde into 9-Carboxymethoxymethylguanine (CMMG)[1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.1808 mL	20.9039 mL	41.8078 mL
5 mM	0.8362 mL	4.1808 mL	8.3616 mL
10 mM	0.4181 mL	2.0904 mL	4.1808 mL
50 mM	0.0836 mL	0.4181 mL	0.8362 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Patrina Gunness, et al. Acyclovir-induced nephrotoxicity: the role of the acyclovir aldehyde metabolite. Transl Res. 2011 Nov;158(5):290-301.

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