

## Ganciclovir-D5

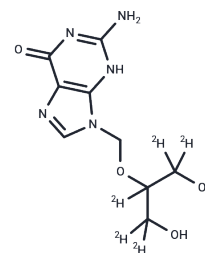
### Chemical Properties

CAS No. : 1189966-73-1

Formula: C<sub>9</sub>H<sub>8</sub>D<sub>5</sub>N<sub>5</sub>O<sub>4</sub>

Molecular Weight: 260.26

Storage: Store at low temperature, Keep away from direct sunlight  
 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	Ganciclovir-D5 is the deuterated form of Ganciclovir, Ganciclovir (T0688) is an antiviral. It is used to treat infections caused by viruses. Ganciclovir (T0688) is used to treat the symptoms of cytomegalovirus (CMV) infection
Targets(IC50)	HSV
In vitro	In specific efficacy studies, Ganciclovir demonstrated antiviral activity against Feline Herpesvirus Type-1 (FHV-1) in cell-free assays, exhibiting an IC50 of approximately 5.2 μM [1].
In vivo	In severe combined immunodeficient (SCID) mice infected with Murine Cytomegalovirus (MCMV), Ganciclovir treatment reduced viral replication and mortality in a dose- and duration-dependent manner [7].

### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.8423 mL	19.2116 mL	38.4231 mL
5 mM	0.7685 mL	3.8423 mL	7.6846 mL
10 mM	0.3842 mL	1.9212 mL	3.8423 mL
50 mM	0.0768 mL	0.3842 mL	0.7685 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

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- Matthews T, et al. Antiviral activity and mechanism of action of ganciclovir. *Rev Infect Dis.* 1988 Jul-Aug;10 Suppl 3: S490-4.
- Duan J, et al. Dose and duration-dependence of ganciclovir treatment against murine cytomegalovirus infection in severe combined immunodeficient mice. *Antiviral Res.* 1998;39(3):189-197.

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