

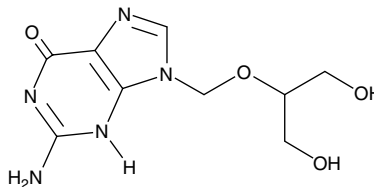
# Product Information



## Ganciclovir

Item No. 13853

**CAS Registry No.:** 82410-32-0  
**Formal Name:** 2-amino-1,9-dihydro-9-[[2-hydroxy-1-(hydroxymethyl)ethoxy]methyl]-6H-purin-6-one  
**Synonyms:** BW 759, 2'-Nor-2'-deoxyguanosine  
**MF:** C<sub>9</sub>H<sub>13</sub>N<sub>5</sub>O<sub>4</sub>  
**FW:** 255.2  
**Purity:** ≥95%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A crystalline solid  
**UV/Vis.:** λ<sub>max</sub>: 254 nm



### Laboratory Procedures

For long term storage, we suggest that ganciclovir be stored as supplied at -20°C. It should be stable for at least two years.

Ganciclovir is supplied as a crystalline solid. A stock solution may be made by dissolving the ganciclovir in the solvent of choice. Ganciclovir is soluble in organic solvents such as DMSO which should be purged with an inert gas. The solubility of ganciclovir in DMSO is approximately 0.33 mg/ml.

Ganciclovir is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Ganciclovir is a synthetic analog of 2'-deoxy-guanosine which is used to treat or prevent cytomegalovirus (CMV) infections.<sup>1-2</sup> It inhibits the replication of human CMV with an IC<sub>50</sub> value of 0.01 μM and is effective against strains of CMV from human, monkey, mouse, and guinea pig.<sup>3-4</sup>

### References

1. Balfour, H.H., Jr. Management of cytomegalovirus disease with antiviral drugs. *Rev. Infect. Dis.* **12**, S849-S860 (1990).
2. Bean, B. Antiviral therapy: Current concepts and practices. *Clin. Microbiol. Rev.* **5**(2), 146-182 (1992).
3. Rasmussen, L., Chen, P.T., Mullenax, J.G., *et al.* Inhibition of human cytomegalovirus replication by 9-(1,3-dihydroxy-2-propoxymethyl)guanine alone and in combination with human interferons. *Antimicrob. Agents Chemother.* **26**(4), 441-445 (1984).
4. Freitas, V.R., Smee, D.F., Chernow, M., *et al.* Activity of 9-(1,3-dihydroxy-2-propoxymethyl)guanine compared with that of acyclovir against human, monkey, and rodent cytomegaloviruses. *Antimicrob. Agents Chemother.* **28**(2), 240-245 (1985).

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**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### MATERIAL SAFETY DATA

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