

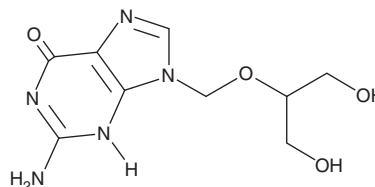
# PRODUCT INFORMATION



## 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%  
**UV/Vis.:** λ<sub>max</sub>: 254 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

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.

### Description

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).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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