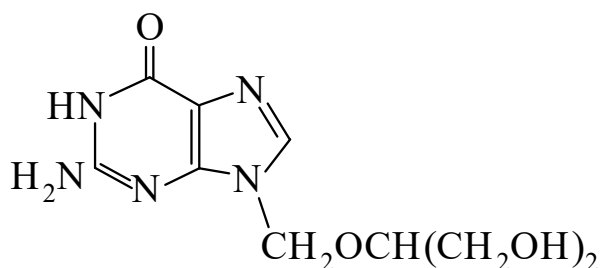




>>>**Entry Name:** Ganciclovir, BAN, INN, USAN

Synonym(s): 2-Amino-1,9-dihydro-9-[[[2-hydroxy-1-(hydroxymethyl)ethoxy]methyl]-6*H*-purin-6-one, 9Cl. 9-[[[2-Hydroxy-1-(hydroxymethyl)ethoxy]methyl]guanine. 9-(1,3-Dihydroxy-2-propoxymethyl)guanine. 2'-Nor-2'-deoxyguanosine. Cytovene. DHPG. 2'-NDG. RS 21592. Biolf 62. BW B759U



CAS Registry Number: 82410-32-0

Related CAS Registry Numbers(s): 175865-61-9 175865-62-0 175865-64-2 175865-67-5

Molecular Formula: C₉H₁₃N₅O₄

Molecular Weight: 255.233

Accurate Mass: 255.096755

Percentage Composition: C 42.35%; H 5.13%; N 27.44%; O 25.07%

Biological Use/Importance: Antiviral agent; active against herpes simplex virus types 1 and 2. Administered (ivn) in treatment of cytomegalovirus

Physical Description: Cryst. (H₂O)

Development Status: Launched 1988

Melting Point: Mp 300°

Calculated Log P Data: Log P -3.22 (calc)

Hazard & Toxicity: Exp. carcinogen. Exp. reprod. and teratogenic effects

Sigma: G2536

>>>**Derivative:** Monohydrate

Melting Point: Mp 248-249 dec.°

>>>**Derivative:** L-Valine monoester

Synonym(s): Valganciclovir, INN. Ganciclovir valine

CAS Registry Number: 175865-60-8

Molecular Formula: C₁₄H₂₂N₆O₅

Molecular Weight: 354.365

Accurate Mass: 354.165169

Percentage Composition: C 47.45%; H 6.26%; N 23.72%; O 22.57%

Biological Use/Importance: Stable prodrug of ganciclovir. Exhibits improved oral absorption

>>>**Derivative:** L-Valine monoester, hydrochloride

Synonym(s): Valganciclovir hydrochloride, USAN

CAS Registry Number: 175865-59-5

Physical Description: Cryst. (2-propanol aq.)

Melting Point: Mp 175° (dec.) (phase change at 142°)

References:

- Ashton, W.T. *et al.*, *Biochem. Biophys. Res. Commun.*, 1982, **108**, 1716, (*synth, uv, pmr, props*)
- Martin, J.C. *et al.*, *J. Med. Chem.*, 1983, **26**, 759, (*synth, uv, pmr, cmr, props*)
- Matthews, T. *et al.*, *Rev. Infect. Dis.*, S490, 1988, **10**, (*rev*)
- Faulds, D. *et al.*, *Drugs*, 1990, **39**, 597, (*rev, pharmacol*)
- Capparell, E. *et al.*, *Ganciclovir Ther. Cytomegalovirus Infect. 1991*, (ed. S.A. Spector) Dekker, 1991, 71, (*rev*)
- Alhede, B. *et al.*, *J.O.C.*, 1991, **56**, 2139-2143, (*synth, cmr*)
- Freie, H.M.P., *Med. Klin. (Munich)*, (Suppl. 1), 1992, **87**, 20, (*rev*)
- Verheyden, J.P.H., *Chron. Drug Discovery*, 1993, **3**, 299, (*ganciclovir, rev*)
- Martindale, *The Extra Pharmacopoeia*, 30th edn., Pharmaceutical Press, 1993, 546
- Eur. Pat.*, 1996, Hoffmann-LaRoche, 694 547; CA, **124**, 290266j, (*synth, pharmacol, valganciclovir*)
- Noble, S. *et al.*, *Drugs*, 1998, **56**, 115-146, (*rev*)
- Boryski, J. *et al.*, *Synthesis*, 1999, 625-628, (*synth, uv*)
- Gao, H. *et al.*, *Synthesis*, 2000, 329-351, (*rev*)