

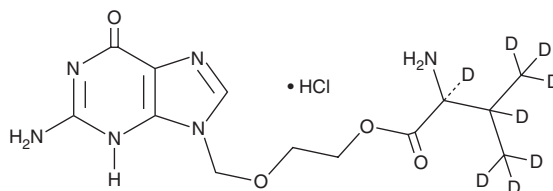
PRODUCT INFORMATION



L-Valacyclovir-d₈ (hydrochloride)

Item No. 31479

CAS Registry No.: 1279033-32-7
Formal Name: L-valine-2,3,4,4,4',4',4'-d₈,
2-[(2-amino-1,6-dihydro-6-oxo-9H-purin-9-yl)methoxy]ethyl ester,
monohydrochloride
MF: C₁₃H₁₂D₈N₆O₄ • HCl
FW: 368.8
Chemical Purity: ≥98% (L-Valacyclovir)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₈); ≤1% d₀
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

L-Valacyclovir-d₈ (hydrochloride) is intended for use as an internal standard for the quantification of L-valacyclovir (Item No. 23801) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

L-Valacyclovir-d₈ (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the L-valacyclovir-d₈ (hydrochloride) in the solvent of choice, which should be purged with an inert gas. L-Valacyclovir-d₈ (hydrochloride) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of L-valacyclovir-d₈ (hydrochloride) in these solvents is approximately 3 and 10 mg/ml, respectively.

Description

L-Valacyclovir is an L-valyl prodrug form of the antiviral guanosine analog acyclovir (Item No. 14160). L-Valacyclovir inhibits herpes simplex virus type 1 (HSV-1) replication (IC₅₀ = 0.84 μM in Vero cells).¹ It is more potent than the stereoisomer D-valacyclovir but less potent than acyclovir *in vitro*, however, it is rapidly converted to acyclovir *in vivo*.² Formulations containing L-valacyclovir have been used in the treatment of HSV-1 infections.

References

1. Beauchamp, L.M., Orr, G.F., de Miranda, P., *et al.* Amino acid ester prodrugs of acyclovir. *Antivir. Chem. Chemother.* **3**(3), 157-164 (1992).
2. Beutner, K.R. Valacyclovir: A review of its antiviral activity, pharmacokinetic properties, and clinical efficacy. *Antiviral Res.* **28**(4), 281-290 (1995).

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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