

# PRODUCT INFORMATION



## Letermovir

Item No. 17556

CAS Registry No.: 917389-32-3

Formal Name: (4S)-8-fluoro-3,4-dihydro-2-[4-(3-methoxyphenyl)-1-piperazinyl]-3-[2-methoxy-5-(trifluoromethyl)phenyl]-4-quinazolineacetic acid

Synonym: AIC246

MF:  $C_{29}H_{28}F_4N_4O_4$

FW: 572.6

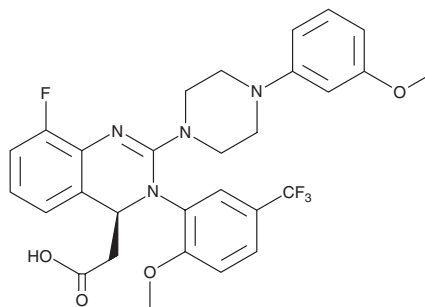
Purity:  $\geq 98\%$

UV/Vis.:  $\lambda_{max}$ : 214, 256 nm

Supplied as: A crystalline solid

Storage:  $-20^{\circ}\text{C}$

Stability:  $\geq 4$  years



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

### Laboratory Procedures

Letermovir is supplied as a crystalline solid. A stock solution may be made by dissolving the letermovir in the solvent of choice, which should be purged with an inert gas. Letermovir is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of letermovir in these solvents is approximately 20 mg/ml.

Letermovir is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, letermovir should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Letermovir has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Letermovir is a small molecule inhibitor of human cytomegalovirus viral replication ( $EC_{50} = \sim 5$  nM with a selectivity index  $>15,000$ ) that targets viral DNA cleavage and packaging.<sup>1,2</sup> It functions to prevent viral DNA concatemers from forming the proper unit length and interferes with virion maturation.<sup>2</sup>

### References

1. Marschall, M., Stamminger, T., Urban, A., *et al.* *In vitro* evaluation of the activities of the novel anticytomegalovirus compound AIC246 (letermovir) against herpesviruses and other human pathogenic viruses. *Antimicrob. Agents Chemother.* **56**(2), 1135-1137 (2012).
2. Goldner, T., Hewlett, G., Ettischer, N., *et al.* The novel anticytomegalovirus compound AIC246 (Letermovir) inhibits human cytomegalovirus replication through a specific antiviral mechanism that involves the viral terminase. *J. Virol.* **85**(20), 10884-10893 (2011).

#### 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.

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