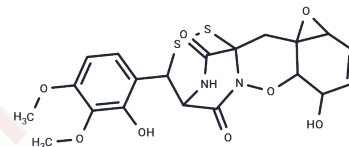


## Gliovirin

## Chemical Properties

CAS No. :	83912-90-7
Formula:	C <sub>20</sub> H <sub>20</sub> N <sub>2</sub> O <sub>8</sub> S <sub>2</sub>
Molecular Weight:	480.51
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



## Biological Description

Description	Gliovirin is a fungal metabolite that has been found in <i>T. harzianum</i> and has fungicidal, antimicrobial and anti-inflammatory activities. It is active against the plant pathogenic fungus <i>P. ultimum</i> (MIC = 60 ng/ml) and the parasite <i>T. brucei brucei</i> (IC <sub>50</sub> = 90 ng/ml), but has no effect on the plant pathogenic fungi <i>R. solani</i> , <i>P. omnivorum</i> , <i>T. basicola</i> , <i>R. arrhizus</i> , and <i>V. dahliae</i> or the bacteria <i>B. thuringiensis</i> , <i>P. fluorescens</i> , and <i>X. malvacearum</i> when used at concentrations up to 1,000 ng/ml. <sup>2,3</sup> Gliovirin decreases phorbol 12-myristate 13-acetate (TPA)- and ionomycin-induced increased expression of COX-2 (IC <sub>50</sub> = 1 μM) and protein levels of IL-2 in Jurkat cells (IC <sub>50</sub> = 5.2 μM). <sup>1</sup>
Targets (IC <sub>50</sub> )	Others, Antibiotic, Antifungal

## Solubility Information

Solubility	Methanol: Soluble DMSO: Soluble Ethanol: Soluble (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0811 mL	10.4056 mL	20.8112 mL
5 mM	0.4162 mL	2.0811 mL	4.1622 mL
10 mM	0.2081 mL	1.0406 mL	2.0811 mL
50 mM	0.0416 mL	0.2081 mL	0.4162 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

- Rether, J., Serwe, A., Anke, T., et al. Inhibition of inducible tumor necrosis factor- $\alpha$  expression by the fungal epipolythiodiketopiperazine gliovirin *Biol. Chem.* 388(6)627-637(2007)
- Howell, C.R., and Stipanovic, R.D. Gliovirin, a new antibiotic from *Gliocladium virens*, and its role in the biological control of *Pythium ultimum* *Can. J. Microbiol.* 29(3)321-324(1983)
- Iwatsuki, M., Otaguro, K., Ishiyama, A., et al. In vitro antitrypanosomal activity of 12 low-molecular-weight antibiotics and observations of structure/activity relationships *J. Antibiot. (Tokyo)* 63(10)619-622(2010)

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