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# Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

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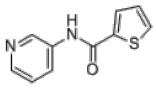
| **Product Name** | : | Gliocidin |
| **Cat. No.** | : | PC-61648 |
| **CAS No.** | : | 62289-81-0 |
| **Molecular Formula** | : | $C_{10}H_8N_2OS$ |
| **Molecular Weight** | : | 204.247 |
| **Target** | : | Influenza Virus |
| **Solubility** | : | 10 mM in DMSO |



## Biological Activity

Gliocidin (SW106065) is a broad **influenza virus** inhibitor acting via IMP dehydrogenase (**IMPDH**), also is an apoptosis inducer in MPNST (malignant peripheral nerve sheath tumors) with EC50 of 1 uM.
Gliocidin (SW106065) is a prodrug that is anabolized into its tumoricidal metabolite, gliocidin–adenine dinucleotide (GAD) by NMNAT1 enzyme, targets a de novo purine synthesis vulnerability in glioblastoma through indirect inhibition of inosine monophosphate dehydrogenase 2 (**IMPDH2**), induces cell death in GBM cells with IC50 of 200 nM.
SW106065 inhibits ATP consumption of sMPNST and other models of MPNST with EC50 of 1 uM, shows no toxicity to normally dividing Schwann cells or mouse embryonic fibroblasts; reduces MPNST burden in a mouse allograft model.CPD A inhibits RNA synthesis of IAV and IBV with EC50 values of 2.3 μM and 2.6 μM, respectively.
SW106065 also displays robust in vitro activity against a broad panel of IAV (H1N1 and H3N2) and IBV strains with median EC50 of 0.2 uM, with no significant cytotoxic effect.
SW106065 inhibits IMP dehydrogenase (IMPDH) and causes strong depletion of the cellular GTP pool.
SW106065 exhibits strongly synergistic effect when combined with another IMPDH inhibitor ribavirin.

## References

Chau V, et al. ***Cancer Res.*** 2014 Jan 15;74(2):586-97.



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