

Catalog #10-3952 Gliocidin

CAS# 62289-81-0 N-(Pyridin-3-yl)thiophen-2-carboxamide Lot # FBA9299

Gliocidin is a nicotinamide-mimetic prodrug that targets de novo purine biosynthesis vulnerability in glioblastoma ($IC_{50} = 150 \text{ nM}$).¹ Gliocidin was converted *via* the NAD+ salvage pathway to gliocidin-adenine dinucleotide with directly interfered with the activity of IMPDH2 resulting in guanylate depletion and cell death. Displays strong blood brain barrier permeability and suppression of glioblastoma in athymic nude mice. Gliocidin showed synergistic effects with temozolomide. Inhibitor of the SARS $3CL^{PRO}$ protease.²

- 1) Chen et al. (2024), Gliocidin is a nicotinamide-mimetic prodrug that targets glioblastoma; Nature 636 466
- 2) Zhang et al. (2007), Design, Synthesis, and Evaluation of Inhibitors for Severe Acute Respiratory Syndrome 3C-Like Protease Based on Phthalhydrazide Ketones or Heteroaromatic Esters; J. Med. Chem. **50** 1850

PHYSICAL DATA

 $\begin{tabular}{lll} Molecular Weight: & 204.25 \\ Molecular Formula: & $C_{10}H_8N_2OS$ \\ Purity: & >98\% \ (HPLC) \\ \end{tabular}$

NMR: (Conforms)

Solubility: DMSO (at least 60 mg/mL)

Physical Description: Pale orange solid

Storage and Stability: Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 3 months.

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