

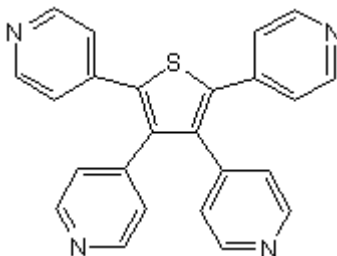
Certificate of Analysis

Product Name: GANT 58
CAS Number: 64048-12-0
IUPAC Name: 2,3,4,5-Tetra(4-pyridyl)thiophene

Catalog No.: 3889 **Batch No.:** 1

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{24}H_{16}N_4S \cdot \frac{1}{2}H_2O$
Batch Molecular Weight: 401.49
Physical Appearance: Yellow solid
Solubility: DMSO to 25 mM
 ethanol to 25 mM
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 100% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	71.8	4.27	13.95
Found	71.87	4.19	14.01

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

GLI antagonist that inhibits GLI1-induced transcription ($IC_{50} = 5 \mu M$). Inhibits the hedgehog (Hh) signaling pathway downstream of SMO and SUFU causing GLI1 nuclear accumulation. Displays antiproliferative and antitumor activity in vivo.

Physical and Chemical Properties:

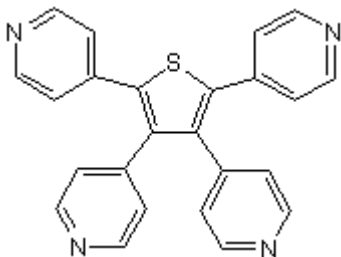
Batch Molecular Formula: $C_{24}H_{16}N_4S \cdot \frac{1}{2}H_2O$

Batch Molecular Weight: 401.49

Physical Appearance: Yellow solid

Minimum Purity: >99%

Batch Molecular Structure:



References:

Lauth et al (2007) Inhibition of GLI-mediated transcription and tumor cell growth by small-molecule antagonists. *Proc.Natl.Acad.Sci.* **104** 8455. PMID: 17494766.

Beauchamp et al (2009) GLI1 is a direct transcriptional target of EWS-FLI1 oncoprotein. *J.Biol.Chem.* **284** 9074. PMID: 19189974.

Joo et al (2009) GLI1 is a central mediator of EWS/FLI1 signaling in Ewing tumors. *PLoS ONE* **4** 7608. PMID: 19859563.

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 25 mM

ethanol to 25 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

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