

Certificate of Analysis

Product Name: SANT-1

Catalog No.: 1974

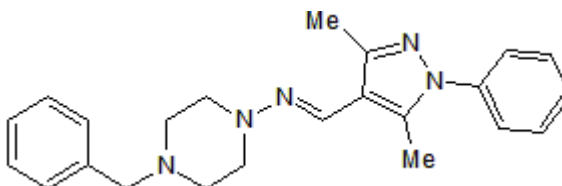
Batch No.: 1

CAS Number: 304909-07-7

IUPAC Name: *N*-[(3,5-dimethyl-1-phenyl-1*H*-pyrazol-4-yl)methylene]-4-(phenylmethyl)-1-piperazinamine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₂₃ H ₂₇ N ₅
Batch Molecular Weight:	373.5
Physical Appearance:	Pale yellow solid
Solubility:	ethanol to 25 mM DMSO to 50 mM
Storage:	Desiccate at +4°C
Batch Molecular Structure:	



2. ANALYTICAL DATA

Melting Point:	Between 104 - 108°C(dec)
HPLC:	Shows >99.6% purity
¹H NMR:	Consistent with structure
Mass Spectrum:	Consistent with structure
Microanalysis:	

	Carbon	Hydrogen	Nitrogen
Theoretical	73.96	7.29	18.74
Found	73.93	7.38	18.93

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

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Description:

Potent, cell-permeable inhibitor of Sonic hedgehog (Shh) signaling; high affinity antagonist of smoothed activity ($K_D = 1.2$ nM). Inhibits smoothed agonist effects with an IC_{50} of 20 nM (in Shh-LIGHT2 cells).

Physical and Chemical Properties:

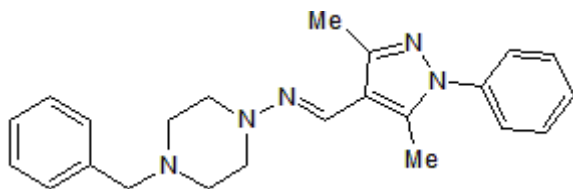
Batch Molecular Formula: $C_{23}H_{27}N_5$

Batch Molecular Weight: 373.5

Physical Appearance: Pale yellow solid

Minimum Purity: >99%

Batch Molecular Structure:



References:

Chen *et al* (2002) Small molecule modulation of smoothed activity. *Proc.Natl.Acad.Sci.USA.* **99** 1407.

Storage: Desiccate at +4°C

Solubility & Usage Info:

ethanol to 25 mM

DMSO to 50 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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