Product Description

SANT-1 is a cell-permeable antagonist that binds directly to Smoothened (Ki = 2.4 nM; Chen et al.; Rominger et al.) and inhibits the Sonic hedgehog (Shh) signaling pathway.

Molecular Name: SANT-1
Alternative Names: Not applicable
CAS Number: 304909-07-7
Chemical Formula: C23H27N5
Molecular Weight: 373.5 g/mol
Purity: ≥ 98%
Chemical Name: N-[(3,5-dimethyl-1-phenyl-1H-pyrazol-4-yl)methylene]-4-(phenylmethyl)-1-piperazinamine

Properties

Physical Appearance: A crystalline solid
Storage: Product stable at -20°C as supplied. Protect product from prolonged exposure to light. For long-term storage, store with a desiccant. Stable as supplied for 12 months from date of receipt.
Solubility:
- DMSO ≤ 8 mM
- Absolute ethanol ≤ 13 mM
For example, to prepare a 5 mM stock solution in DMSO, resuspend 1 mg in 535 μL of DMSO.

Prepare stock solution fresh before use. Information regarding stability of small molecules in solution has rarely been reported, however, as a general guide we recommend storage in DMSO at -20°C. Aliquot into working volumes to avoid repeated freeze-thaw cycles. The effect of storage of stock solution on compound performance should be tested for each application.

Compound has low solubility in aqueous media. For use as a cell culture supplement, stock solution should be diluted into culture medium immediately before use. Avoid final DMSO concentration above 0.1% due to potential cell toxicity.
Published Applications

DIFFERENTIATION
· Promotes beta cell differentiation from human embryonic stem cells (Yung et al.).

CANCER RESEARCH
· Blocks hedgehog signaling pathway leading to inhibition of tumorigenesis and proliferation in cancer lung cells (Bai et al.).

References

Related Small Molecules
For a complete list of small molecules available from STEMCELL Technologies, visit www.stemcell.com/smallmolecules or contact us at techsupport@stemcell.com.