

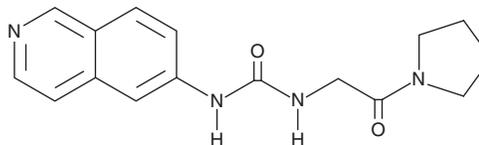
PRODUCT INFORMATION



SGC707

Item No. 17017

CAS Registry No.: 1687736-54-4
Formal Name: N-6-isoquinolinylnyl-N'-[2-oxo-2-(1-pyrrolidinyl)ethyl]-urea
MF: C₁₆H₁₈N₄O₂
FW: 298.3
Purity: ≥98%
Stability: ≥2 year at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 248, 294 nm



Laboratory Procedures

For long term storage, we suggest that SGC707 be stored as supplied at -20°C. It should be stable for at least two years.

SGC707 is supplied as a crystalline solid. A stock solution may be made by dissolving the SGC707 in the solvent of choice. SGC707 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of SGC707 in ethanol is approximately 5 mg/ml and approximately 2 mg/ml in DMSO and DMF.

SGC707 is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Protein arginine N-methyltransferase 3 (PRMT3, Item No. 11642) is a predominantly cytoplasmic enzyme that is constitutively expressed.^{1,2} SGC707 is a potent allosteric inhibitor of PRMT3 (IC₅₀ = 50 nM) with >100-fold selectivity over other methyltransferases and other non-epigenetic targets. Developed by the Structural Genomics Consortium (SGC), SGC707 avidly binds PRMT3 (K_d = 50 nM by isothermal titration calorimetry) and inhibits the methylation of histones in cells with an IC₅₀ value below 1 μM.

References

1. Tang, J., Gary, J.D., Clarke, S., et al. PRMT3, a type I protein arginine N-methyltransferase that differs from PRMT1 in its oligomerization, subcellular localization, substrate specificity, and regulation. *J. Biol. Chem.* **273**(27), 16935-16945 (1998).
2. Wolf, S.S. The protein arginine methyltransferase family: An update about function, new perspectives and the physiological role in humans. *Cell. Mol. Life Sci.* **66**, 2109-2121 (2009).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM