

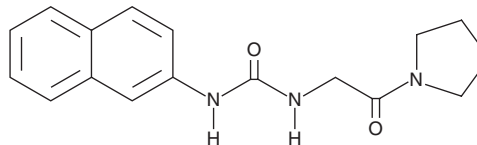
PRODUCT INFORMATION



XY1

Item No. 17518

CAS Registry No.: 1624117-53-8
Formal Name: N-2-naphthalenyl-N'-[2-oxo-2-(1-pyrrolidinyl)ethyl]-urea
MF: C₁₇H₁₉N₃O₂
FW: 297.4
Purity: ≥98%
UV/Vis.: λ_{max}: 245 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

XY1 is supplied as a crystalline solid. A stock solution may be made by dissolving the XY1 in the solvent of choice, which should be purged with an inert gas. XY1 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of XY1 in these solvents is approximately 25 and 10 mg/ml, respectively.

XY1 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, XY1 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. XY1 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. 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 (Item No. 17017) is a potent, selective allosteric inhibitor of PRMT3 (IC₅₀ = 50 nM). It inhibits the methylation of histones in cells with an IC₅₀ value below 1 μM. XY1 is a close analog of SGC707 that is completely inactive against PRMT3 at concentrations as high as 100 μM.³ It is intended to be used as a negative control for SGC707 in studies involving PRMT3 action. See the Structural Genomics Consortium (SGC) website for more information.

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**(13), 2109-2121 (2009).
3. Kaniskan, H.Ü., Szewczyk, M.M., Yu, Z., *et al.* A potent, selective and cell-active allosteric inhibitor of protein arginine methyltransferase 3 (PRMT3). *Angew. Chem. Int. Ed. Engl.* **54**(17), 5166-5170 (2015).

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.

WARRANTY AND LIMITATION OF REMEDY

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