

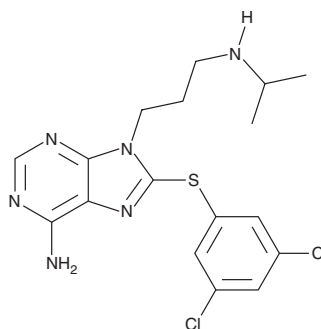
PRODUCT INFORMATION



PU-WS13

Item No. 18409

CAS Registry No.: 1454619-14-7
Formal Name: 6-amino-8-[(3,5-dichlorophenyl)thio]-N-(1-methylethyl)-9H-purine-9-propanamine
Synonym: WS13
MF: C₁₇H₂₀Cl₂N₆S
FW: 411.4
Purity: ≥98%
UV/Vis.: λ_{max}: 308 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

PU-WS13 is supplied as a crystalline solid. A stock solution may be made by dissolving the PU-WS13 in the solvent of choice, which should be purged with an inert gas. PU-WS13 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of PU-WS13 in ethanol is approximately 25 mg/ml and approximately 30 mg/ml in DMSO and DMF.

PU-WS13 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PU-WS13 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. PU-WS13 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

PU-WS13 is an inhibitor of the heat shock protein family member and chaperone protein glucose-regulated protein 94 (GRP94; IC₅₀ = 0.22 μM).¹ It is selective for GRP94 over the chaperones Hsp90α, Hsp90β, and TRAP1 (IC₅₀s = 27.3, 41.8, and 7.3 μM, respectively). PU-WS13 (0.5, 2.5, and 12.5 μM) induces apoptosis without increasing Hsp70 protein levels in HER2-overexpressing SK-BR-3, BT474, and MDA-MB-361 breast cancer cells.² It also induces apoptosis and necrosis in multiple myeloma cells but does not induce cell death in pre-B leukemic cells.³

References

1. Patel, H.J., Patel, P.D., Ochiana, S.O., *et al.* Structure-activity relationship in a purine-scaffold compound series with selectivity for the endoplasmic reticulum Hsp90 paralog Grp94. *J. Med. Chem.* **58(9)** (2015).
2. Patel, P.D., Yan, P., Seidler, P.M., *et al.* Paralog-selective Hsp90 inhibitors define tumor-specific regulation of HER2. *Nat. Chem. Bio.* **9(11)**, 677-684 (2013).
3. Hua, Y., White-Gilbertson, S., Kellner, J., *et al.* Molecular chaperone gp96 is a novel therapeutic target of multiple myeloma. *Clin. Cancer Res.* **19(22)**, 6242-6251 (2013).

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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