

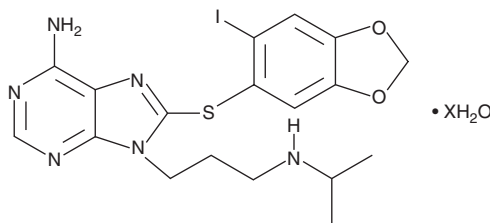
PRODUCT INFORMATION



PU-H71 (hydrate)

Item No. 11450

CAS Registry No.: 1202865-65-3
Formal Name: 6-amino-8-[(6-iodo-1,3-benzodioxol-5-yl)thio]-N-(1-methylethyl)-9H-purine-9-propanamine, hydrate
MF: C₁₈H₂₁IN₆O₂S • XH₂O
FW: 512.4
Purity: ≥98%
UV/Vis.: λ_{max}: 219, 285, 349 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

PU-H71 (hydrate) is supplied as a crystalline solid. A stock solution may be made by dissolving the PU-H71 (hydrate) in the solvent of choice. PU-H71 (hydrate) is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of PU-H71 (hydrate) in these solvents is approximately 10 mg/ml.

PU-H71 (hydrate) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PU-H71 (hydrate) should first be dissolved in DMF and then diluted with the aqueous buffer of choice. PU-H71 (hydrate) has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

PU-H71 is an inhibitor of heat shock protein 90 (Hsp90; IC₅₀ = 16.1 nM in a fluorescence polarization assay).¹ It induces HER2 degradation *via* disrupting Hsp90-HER2 interactions and decreases growth in SK-BR-3 breast cancer cells (IC₅₀ = 50 nM for both). PU-H71 (1 μM) decreases viability of MM.1S and dexamethasone-resistant MM.1R multiple myeloma cells. It induces cell cycle arrest at the G₁/S phase in MM.1R cells when used at a concentration of 100 nM.² PU-H71 (75 mg/kg every other day) decreases tumor volume in MDA-MB-231 and HCC1806 breast cancer xenograft mouse models.³

References

1. He, H., Zatorska, D., Kim, J., *et al.* Identification of potent water soluble purine-scaffold inhibitors of the heat shock protein 90. *J. Med. Chem.* **49**(1), 381-390 (2006).
2. Usmani, S.Z., Bona, R.D., Chiosis, G., *et al.* The anti-myeloma activity of a novel purine scaffold HSP90 inhibitor PU-H71 is via inhibition of both HSP90A and HSP90B1. *J. Hematol. Oncol.* **3**(40), 1-8 (2010).
3. Caldas-Lopes, E., Cerchietti, L., Ahn, J.H., *et al.* Hsp90 inhibitor PU-H71, a multimodal inhibitor of malignancy, induces complete responses in triple-negative breast cancer models. *Proc. Natl. Acad. Sci. USA* **106**(20), 8368-8373 (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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 04/24/2025

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