

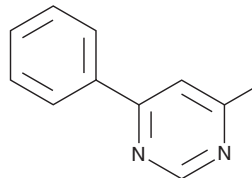
PRODUCT INFORMATION



4-IPP

Item No. 31770

CAS Registry No.: 41270-96-6
Formal Name: 4-iodo-6-phenyl-pyrimidine
MF: $C_{10}H_7IN_2$
FW: 282.1
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 284 nm
Supplied as: A solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



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

Laboratory Procedures

4-IPP is supplied as a solid. A stock solution may be made by dissolving the 4-IPP in the solvent of choice, which should be purged with an inert gas. 4-IPP is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 4-IPP in these solvents is approximately 30 mg/ml.

4-IPP is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 4-IPP should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. 4-IPP has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

4-IPP is an inhibitor of macrophage migration inhibitory factor (MIF).¹ It acts as a suicide substrate for MIF, leading to covalent modification of the N-terminal proline required for activation of its catalytic activity. 4-IPP (10 and 100 μM) inhibits the migration and anchorage-independent growth of A549 non-small cell lung cancer (NSCLC) cells. It inhibits proliferation of, and induces apoptosis in, TPC-1 thyroid carcinoma cells when used at concentrations of 50 and 100 μM .² 4-IPP (~50 mg/kg) also inhibits the tautomerase activity of MIF in mouse liver *in vivo*.¹

References

1. Winner, M., Meier, J., Zierow, S., *et al.* A novel, macrophage migration inhibitory factor suicide substrate inhibits motility and growth of lung cancer cells. *Cancer Res.* **68(18)**, 7253-7257 (2008).
2. Varinelli, L., Caccia, D., Volpi, C.C., *et al.* 4-IPP, a selective MIF inhibitor, causes mitotic catastrophe in thyroid carcinomas. *Endocr.-Relat. Cancer* **22(5)**, 759-775 (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

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, 11/08/2022

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