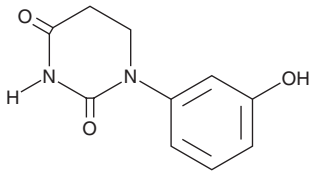
PRODUCT INFORMATION

1-(3-Hydroxyphenyl)dihydropyrimidine-2,4(1H,3H)-dione

Item No. 46507

CAS Registry No.:	1310680-01-3
Formal Name:	dihydro-1-(3-hydroxyphenyl)-2,4(1H,3H)-pyrimidinedione
Synonym:	Hydrouracil-3-PhOH
MF:	$C_{10}H_{10}N_2O_3$
FW:	206.2
Purity:	≥98%
Supplied as:	A 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

1-(3-Hydroxyphenyl)dihydropyrimidine-2,4(1H,3H)-dione is supplied as a solid. A stock solution may be made by dissolving the 1-(3-hydroxyphenyl)dihydropyrimidine-2,4(1H,3H)-dione in the solvent of choice, which should be purged with an inert gas. 1-(3-Hydroxyphenyl)dihydropyrimidine-2,4(1H,3H)-dione is sparingly soluble (1-10 mg/ml) in DMSO.

Description

1-(3-Hydroxyphenyl)dihydropyrimidine-2,4(1H,3H)-dione is an anticancer agent and synthetic intermediate.[1,2] It reduces the viability of cisplatin-resistant FaDu cells (IC_{50} = 9.9 µM).[1] It is active against multidrug-resistant *S. aureus* and *E. faecalis* (MICs = 16 and 32 µg/ml) but not multidrug-resistant *E. coli*, *K. pneumoniae*, *P. aeruginosa*, or *A. baumannii* (MICs = >64 µg/ml for all). 1-(3-Hydroxyphenyl) dihydropyrimidine-2,4(1H,3H)-dione has been used in the synthesis of substituted naphthalenediones with antibacterial and antifungal activity.[2]

References

1. Kavaliauskas, P., Acevedo, W., Mickevičiūtė, E., *et al.* 3,3'-((3-Hydroxyphenyl)azanediyl)dipropionic acid derivatives as a promising scaffold against drug-resistant pathogens and chemotherapy-resistant cancer. *Pathogens* **14(5)**, 484 (2025).
2. Voskienė, A., Sapijanskaitė, B., Mickevičius, V., *et al.* Synthesis, chemical properties, and antimicrobial activity of 2- and 2,3-substituted [(tetrahydro-2,4-dioxopyrimidin-1(2H)-yl)-phenoxy]naphthalene-1,4-diones. *Monatsh Chem.* **142**, 529-537 (2011).

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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