

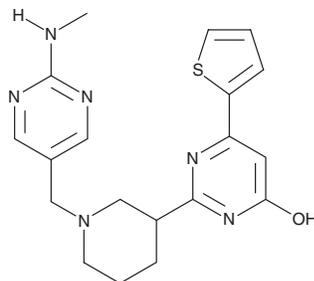
PRODUCT INFORMATION



Ribocil

Item No. 18487

CAS Registry No.: 1381289-58-2
Formal Name: 2-[1-[[2-(methylamino)-5-pyrimidinyl]methyl]-3-piperidinyl]-6-(2-thienyl)-4(3H)-pyrimidinone
MF: C₁₉H₂₂N₆OS
FW: 382.5
Purity: ≥98%
UV/Vis.: λ_{max}: 244, 313 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

Ribocil is supplied as a crystalline solid. A stock solution may be made by dissolving the ribocil in the solvent of choice, which should be purged with an inert gas. Ribocil is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of ribocil in these solvents is approximately 12 and 10 mg/ml, respectively.

Ribocil is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ribocil should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Ribocil has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Ribocil is a synthetic mimic of riboflavin 5'-monophosphate (FMN; Item No. 18167) that competes with the natural ligand to inhibit FMN riboswitch-mediated expression of *ribB*, a gene responsible for the synthesis and transport of riboflavin.¹ Ribocil depletes cellular levels of riboflavin with an IC₅₀ value of 0.3 μM and inhibits *E. coli* growth with an MIC value of 2 μg/ml.¹

Reference

1. Howe, J.A., Wang, H., Fischmann, T.O., *et al.* Selective small-molecule inhibition of an RNA structural element. *Nature* (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