

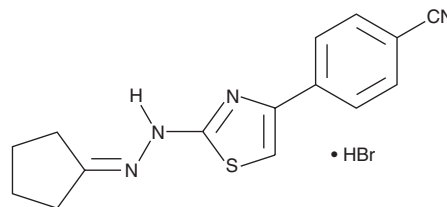
PRODUCT INFORMATION



Remodelin (hydrobromide)

Item No. 16066

CAS Registry No.: 1622921-15-6
Formal Name: 4-[2-(2-cyclopentylidenehydrazinyl)-4-thiazolyl]-benzonitrile, monohydrobromide
MF: C₁₅H₁₄N₄S • HBr
FW: 363.3
Purity: ≥98%
UV/Vis.: λ_{max}: 281 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

Remodelin (hydrobromide) is supplied as a crystalline solid. A stock solution may be made by dissolving the remodelin (hydrobromide) in the solvent of choice, which should be purged with an inert gas. Remodelin (hydrobromide) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of remodelin (hydrobromide) in ethanol is approximately 0.5 mg/ml and approximately 25 mg/ml in DMSO and DMF.

Remodelin (hydrobromide) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, remodelin (hydrobromide) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Remodelin (hydrobromide) has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Progeria is a genetic disorder that results in the appearance of premature aging. Genetically, progeria is characterized by a mutation in lamin A, which results in misshapen cell nuclei and DNA damage. Remodelin is a 2-thiazolylhydrazone derivative that, at 10 μM, improves nuclear architecture, chromatin organization, and survival of both cells lacking lamin A and cells from patients with progeria.¹ Remodelin is an inhibitor of N-acetyltransferase 10 (NAT10), which acetylates both histones and microtubules.¹ Mutation of NAT10 mimics the effects of remodelin on nuclear morphology, suggesting that these effects of remodelin require NAT10.¹ Remodelin also has cytotoxic effects against some species of the fungus *Candida*.²

References

1. Larrieu, D., Britton, S., Demir, M., *et al.* Chemical inhibition of NAT10 corrects defects of laminopathic cells. *Science* **344**(6183), 527-532 (2014).
2. Chimenti, F., Bizzarri, B., Maccioni, E., *et al.* Synthesis and *in vitro* activity of 2-thiazolylhydrazone derivatives compared with the activity of clotrimazole against clinical isolates of *Candida spp.* *Bioorg. Med. Chem. Lett.* **17**(16), 4635-4640 (2007).

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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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