

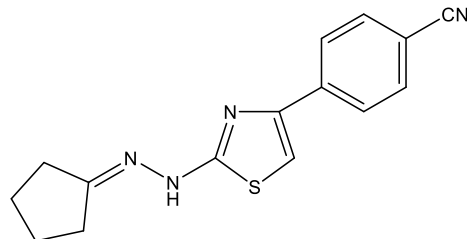
Catalog # 10-5085

Remodelin

CAS# 949912-58-7

4-[2-(2-cyclopentylidenehydrazinyl)-4-thiazolyl]-benzonitrile

Lot # X109577



Potent and selective inhibitor of N-acetyltransferase 10 (NAT10) which is capable of acetylating microtubules and histones.¹ Improves nuclear architecture, chromatin organization and fitness of both human lamin A/C-depleted cells and Hutchinson-Gilford progeria syndrome patient cells¹, normalizing progeric and aging cells². Enhances health span in a mouse model of human accelerated aging syndrome.³ Significantly reduces many of the defects associated with accumulation of the lamin A precursor, prelamin A.⁴ Inhibits NAT10-promoted metastasis which may be mediated by endothelial-to-mesenchymal transition in hepatocellular carcinoma.⁵

- 1) Larrieu *et al.* (2014), *Chemical Inhibition of NAT10 Corrects Defects of Laminopathic Cells*; *Science*, **344** 527
- 2) Larrieu *et al.* (2018), *Inhibition of the Acetyltransferase NAT10 Normalizes Progeric and Aging Cells by Rebalancing the Transportin-1 Nuclear Import Pathway*; *Sci. Signal.*, **11** eaar5401
- 3) Balmus *et al.* (2018), *Targeting of NAT10 Enhances Healthspan in a Mouse Model of Human Accelerated Aging Syndrome*; *Nature Commun.*, **9** 1700
- 4) Cobb *et al.* (2016), *Prelamin A impairs 53BP1 nuclear entry by mislocalizing NUP153 and disrupting the Ran gradient*; *Aging Cell*, **15** 1039
- 5) Ma *et al.* (2016), *Up regulation of NAT10 promotes metastasis of hepatocellular carcinoma cells through epithelial-to-mesenchymal transition*; *Am. J. Transl. Res.*, **8** 4215

PHYSICAL DATA

Molecular Weight:	282.36
Molecular Formula:	C ₁₅ H ₁₄ N ₄ S
Purity:	98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 40 mg/ml)
Physical Description:	Pale-yellow solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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