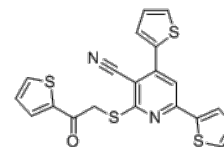


Product Name : FOXM1 inhibitor RCM-1
Cat. No. : PC-72976
CAS No. : 339163-65-4
Molecular Formula : C₂₀H₁₂N₂OS₄
Molecular Weight : 424.58
Target : Other Targets
Solubility : 10 mM in DMSO



Biological Activity

FOXM1 inhibitor RCM-1 (Robert Costa Memorial drug-1, RCM-1) is a small molecule potent inhibitor of **FOXM1** transcription factor.

RCM-1 inhibited the nuclear localization of FOXM1 protein, increased its ubiquitination and caused degradation of FOXM1 in proteasome.

RCM-1 reduced airway resistance, increased lung compliance, and decreased proinflammatory cytokine production in mice exposed to the house dust mite and interleukin-13 (IL-13), which triggers goblet cell metaplasia.

RCM-1 reduced the formation and growth of tumor cell colonies in the colony formation assay.

In animal models, RCM-1 treatment inhibited growth of mouse rhabdomyosarcoma Rd76-9, melanoma B16-F10, and human H2122 lung adenocarcinoma.

RCM-1 decreased FOXM1 protein in the tumors, reduced tumor cell proliferation, and increased tumor cell apoptosis.

RCM-1 decreased protein levels and nuclear localization of β -catenin, and inhibited protein-protein interaction between β -catenin and FOXM1 in cultured tumor cells and in vivo.

References

Lifeng Sun, et al. *Sci Signal*. 2017 Apr 18;10(475):eaai8583.

Samriddhi Shukla, et al. *Mol Cancer Ther*. 2019 Jul;18(7):1217-1229.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com