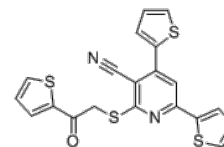


**Product Name** : FOXM1 inhibitor RMC-1  
**Cat. No.** : PC-72976  
**CAS No.** : 339163-65-4  
**Molecular Formula** : C<sub>20</sub>H<sub>12</sub>N<sub>2</sub>OS<sub>4</sub>  
**Molecular Weight** : 424.58  
**Target** : Other Targets  
**Solubility** :



## Biological Activity

FOXM1 inhibitor RMC-1 (Robert Costa Memorial drug-1, RMC-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  $\beta$ -catenin, and inhibited protein-protein interaction between  $\beta$ -catenin and FOXM1 in cultured tumor cells and in vivo.

## References

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

Samridhi 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!**

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